00133769

THE
ASIATIC SOCIETY OF BOMBAY
TOWN HALL, BOMBAY-400 023.

Digitized with financial assistance from

Government of Maharashtra

on 01 February, 2020

ADMINISTRATION REPORT

OF THE

MUNICIPAL COMMISSIONER

FOR THE

CITY OF BOMBAY

FOR THE YEAR 1918-19.

133769

BOMBAY:
PRINTED AT THE TIMES PRESS.

1919.

00133769

CONTENTS.

PART I.

		Pages.
STANDING COMMITTEE'S "REVIEW" OF THE REPORT		i-xviii
COMMISSIONER'S REPORT		1-16
ACCOMPANIMENTS.		
1. FINANCIAL ...	Report of the Chief Accountant, with Appendices ...	17-132
2. REVENUE ...	Report of the Assessor and Collector	133-137
	Report of the Deputy Assessor and Town Duty Refund Officer	139-141
3. PUBLIC WORKS ...	Report of the Executive Engineer	143-178
	Municipal Building Construction	143-149
	Schemes—Overbridges, Roads, &c.	150
	Miscellaneous Works (including Plague Measures)	150-151
	Disposal of Town Sweepings	151
	Drainage	152-157
	Mechanical Branch	158-164
	Roads	164-170
	Footpaths	171
	Tramways	171
	Public Lighting...	172-173
	Private Building Construction (including setbacks)	173-178
	Report of the Hydraulic Engineer	179-189
	Report of the Chief Officer, Fire Brigade	191-199
	Report of the Superintendent of Gardens	201-207
	Report of the Curator and Secretary, Victoria and Albert Museum	209-211
	Report of the General Stores Department	213-220
4. LICENSES... ...	Report of the Superintendent of Licenses	221-225
5. MARKETS... ...	Report of the Superintendent of Markets	227-231
6. EDUCATIONAL ...	Report of the Schools Committee	233-262
7. AUDITORS' REPORT		263-277

PART II.

8. PUBLIC HEALTH ...	Health Officer's Report	1-71
	Report of the Medical Officer-in-Charge, Arthur Road Hospital	73-83
	Report of the Medical Officer-in-Charge, Maratha Plague Hospital	85-90
	Report of the Municipal Analyst	91-98
	Report of the Superintendent of Vaccination ...	99-102
	Table showing Meteorological Data...	103
	Vital Statistics of Health Officer's Report	104-166

Review by the Standing Committee of the Administration Report of the Municipal Commissioner for the City of Bombay for the year 1918-19.

Corporation and Standing Committee.

Mr. Rahimtulla Currimbhoy, B.A., was President of the Corporation, and Dr. S. S. Batliwala, L.M. & S., Chairman of the Standing Committee, for the year.

2. Ninety-two meetings were held by the Corporation, and 54 by the Standing Committee, including 2 special meetings. There were besides 95 meetings of Committees of the Corporation and 13 meetings of Sub-Committees of the Standing Committee.

Commissioner.

3. Throughout the year Mr. P. W. Monie, I.C.S., continued to hold the office of Municipal Commissioner for the City of Bombay.

Financial.

4. The general financial position of the Municipality continued to be satisfactory. With taxation at the same rates as in the previous year, the year's income shows a net excess of Rs. 25,44,798 over that of the previous year, and the net result of the transactions shows a surplus of Rs. 3,47,536, against Rs. 5,67,996 for the preceding year. The year opened with a working Cash Balance of Rs. 71,61,781, including Rs. 11,17,198 being renewals of grants for 1917-18 and previous years, Rs. 11,52,687, the contribution payable to the City Improvement Trust during the year under report, Rs. 1,00,000, the minimum cash balance required under the Municipal Act, Rs. 6,98,304, the value of stores in hand, and Rs. 67,001, the amount advanced for the purchase of plant and machinery, and closed with a balance of Rs. 75,09,317. Exclusive of Rs. 13,67,73, reserved for lapsed grants required to be renewed in 1919-20, Rs. 15,19,800, ear-marked for payment to the City Improvement Trust on 1st May 1919, Rs. 1,00,000, the minimum balance required by law, Rs. 6,86,961, the value of stores in hand, and Rs. 86,901, the value of plant and machinery, the real unhypothecated Cash Balance at the close of the year stood at Rs. 37,49,482, against Rs. 40,26,591, at the close of the year preceding. This surplus has already been entrenched upon during the current year (1919-20) to the extent of Rs. 4,20,711 for revenue purposes. It will have further to be drawn upon to cover the deficit of Rs. 8,17,592, estimated for the year 1919-20 The available surplus is thus reduced to Rs. 25,11,179, of which a portion is held in 3½ per cent. Government paper of the book value and face value of Rs. 12,07, 300, and Rs. 17,49,800 respectively.

5. The property taxes which are the stable sources of Municipal revenue continued to show their elasticity and yielded in the aggregate Rs. 23,13,445 more this year than in the previous year at the same rates of taxation. Deducting a sum of Rs. 9,93,128 received from the Port Trust as arrears of their contribution in respect of General Tax due for the years 1914-15 to 1917-18, the net increase was Rs. 13,20,317, which is very satisfactory as it is in addition to the previous year's similar increase of Rs. 5,82,423. This progressive advance in the revenue from property taxes is likley to continue for some years to come in view of the anticipated further developments of the City. The Assets of the Municipality aggregate Rs. 12,44,16,094 against

Liabilities amounting to Rs. 8,51,21,209, showing an excess of Rs. 3,92,94,885. Although, as shown in paragraph 13 of the Chief Accountant's report, the wealth liable to taxation has so far grown faster than the indebtedness of the Corporation, and the margin upto which further borrowing by the Corporation is permissible under Section 109 of the Municipal Act is estimated at over Rs. 7 crores, yet the actual financial capacity of the Corporation to raise further loans for purposes other than those of the Water Works and the Fire Brigade is at present limited to about Rs. 54 lakhs as shown in paragraph 71 of the Chief Accountant's report. This strangulation of the Corporation's capacity to raise further capital is likely to hamper them in undertaking or expeditiously prosecuting works which are urgently required to be carried out for the improvement of the City in various directions. The matter has been separately considered by the Standing Committee at the instance of the Municipal Commissioner and their recommendation as to the immediate steps that should be taken in the matter is already before the Corporation.

Income.

6. Although the rates of taxation were the same as in the preceding year, there was a rise of Rs. 25,44,798 in the income for the year which, beating all previous records, amounted to Rs. 1,73,74,185 against Rs. 1,48,29,387 for the previous year. The General Tax brought in an increase of Rs. 18,12,618 over the previous year due partly to the erection of new buildings and enhancement in the rateable value of existing buildings and partly to the arrears received from the Port Trustees from 1914-15 to 1917-18 on the quinquennial revision of assessment of their properties. Owing to greater consumption of water by the Port Trust, Railways, Mills, Military Camps, &c., the realizations from Water Tax were Rs. 2,79,882 in excess of those for the previous year. The receipts from Halalkhore Tax were Rs. 2,20,945 more than those for the previous year. There was also an increase of Rs. 17,664 in the revenue from Wheel Tax and Tolls, owing to an increase in the number of motor cars. The market receipts also, showed an increased realization of Rs. 49,702 over that of the preceding year due to increase in stall rents, squatters' fees, fair ground and feeding fees and slaughter fees. The only appreciable decrease was in the realization from Town Duties, the receipts from which were Rs. 85,722 less than those of the previous year due to the falling off in the receipts from wines, spirits, sugar, ghee and timber. Taking all the factors of expansion into consideration and eliminating all variable and unreliable sources of revenue, the Chief Accountant estimates the permanent expansion in the income of the Municipality at Rs. 14,50,000.

Incidence of Taxation.

7. The following table shows the incidence of taxation per head of population for the last quinquennium :—

Year.	Incidence per head on population by census of 1911.
	Rs. a. p.
1914-15	10 14 8
1915-16	12 9 8
1916-17	12 11 11
1917-18	13 9 4
1918-19	15 14 2

The actual incidence of taxation must be taken to be considerably less, as the population has advanced over the census figure of 1911 by about 3 lakhs. Calculated on an estimated population of 12,00,000 the incidence would be about Rs. 12-15-5 for the year under review.

Expenditure.

8. The total expenditure for the year reached the unprecedented figure of Rs. 1,70,26,649, indicating an advance of Rs. 27,65,258 on the outlay of Rs. 1,42,61,391 for the previous year. Some of the principal factors contributing to this enhancement were as under :—

	Rs.
Public Gardens	11,530
Fire Brigade	35,732
Public Works	7,19,574
Public Health Department	3,89,353
Markets and Slaughter Houses	1,35,803
Primary Education	2,35,708
Hospitals...	42,758
Miscellaneous (including grain compensation and war allowance)	3,59,529
Contribution to the City Improvement Trust	54,574
Debt	2,44,195
Depreciation on Government Paper held in Surplus Funds...	6,34,256

Making allowances for all casual and non-recurring items, the Chief Accountant estimates the permanent increase in expenditure at Rs. 13,16,000 as under, against Rs. 3,00,000 for the past year :—

	Rs.
Public Gardens	7,000
Public Works Department	4,60,000
Public Health Department	1,83,000
Markets and Slaughter Houses...	52,000
Education	1,95,000
Hospitals	15,000
War Allowance	3,50,000
Contribution to the City Improvement Trust... ...	54,000
Total Rs. ...	13,16,000

Although the outlay on war allowance may be considered to be a non-recurring item of expenditure, yet it cannot be eliminated from the aforesaid calculation, as, in view of the fact that the prices of food-stuffs and other necessaries of life are not likely to fall appreciably for some time to come, the question of providing for increased rates of pay to Municipal employes will have in all probability to be faced. While the estimated permanent expansion of revenue (amounting to Rs. 14,50,000,) is $2\frac{1}{8}$ times that of the preceding year (Rs. 6,80,000), the estimated permanent expansion of expenditure (amounting to Rs. 13,16,000), is $4\frac{1}{3}$ times that of the previous year (Rs. 3,00,000), showing that the rate of expansion of expenditure is twice as fast as that of the income. The balance of Rs. 1,34,000 in favour of income cannot therefore be expected to continue with the present rates of taxation.

9. Lapsed Grants, &c.—Out of the total sanctioned grants for expenditure aggregating Rs. 1,87,67,255, a balance of Rs. 17,40,606 remained unexpended at the close of the year. Of this, Rs. 13,67,073 required renewal for expenditure in 1919-20, leaving as savings a sum of Rs. 3,73,533. The amount which required renewal shows an increase of Rs. 2,49,875, as compared with the amount for the previous year.

10. Loan Works Expenditure.—The expenditure on Loan Works during the year aggregated Rs. 22,10,033 against Rs. 12,51,212 in the preceding year, showing an increase of Rs. 9,58,821. Besides this an expenditure of Rs. 5,20,135 was incurred on Loan Works out of advances from Surplus Cash Balance against a similar expenditure of Rs. 3,34,586 incurred during the preceding year. The total advances made from Surplus Cash Balance for Loan Works expenditure up to the end of the year aggregated Rs. 14,68,301, against which credits amounting to Rs. 8,69,088, were taken on account of adjustments to be made against the new loan of Rs. 30 lakhs raised during the year. The total amount made available for expenditure on Loan Works was Rs. 34,06,557, out of which Rs. 18,61,080 were spent or a little over 54 per cent. against 50 per cent. last year. This shows a little greater activity on the part of the Executive Departments inspite of the continuance of the adverse circumstances due to the War.

11. Plague Expenditure.—The expenditure on plague operations during the year amounted to Rs. 1,26,506, against Rs. 1,32,160, showing a decrease of Rs. 5,654. The total outlay on plague measures from its outbreak upto the close of the year under review aggregated Rs. 84,86,063.

12. Street Improvements.—During the year, amounts aggregating Rs. 3,76,974 were made available for payment of compensation in respect of set-backs acquired. Against this sum, Rs. 3,52,138 were actually paid, leaving a balance of Rs. 24,836 which has been renewed for expenditure during 1919-20. The undischarged commitments up to 31st July 1919 in regard to set-backs already acquired and sanctioned to be acquired, amounted to Rs. 7,90,146, against which the funds sanctioned aggregated Rs. 1,22,525 *plus* Rs. 27,551 realized by the sale proceeds of set-forward lands and recoveries of "enhanced values" during 1918-19 which will go to meet set-back payments. The excess of liabilities over funds available thus amounts to Rs. 6,40,070.

13. Capital Debt.—During the year a loan of Rs. 30 lakhs was obtained from the Bank of Bombay on the security of 12 months' bills, and Rs. 2,36,995 were paid towards the reduction of debt. The total Capital Debt of the Corporation thus increased from Rs. 7,41,43,633 to Rs. 7,69,06,639. Deducting from this Rs. 52,500, being the amount of the outstanding debentures of the Drainage Loan of 1878 redeemable on or prior to 1st January 1919, which is covered by a renewed grant, the outstanding Debt at the close of the year amounted to Rs. 7,68,54,139. Against this debt, the total Sinking Fund investments aggregated Rs. 2,14,19,974, leaving a net debt liability of Rs. 5,54,34,165 against Rs. 5,43,06,846 in the preceding year.

14. Stores Audit.—During the year the work of verifying stock was entrusted to an outsider and the result of his verification just reported to the Corporation is quite satisfactory. The stores in stock on the last day of the year were valued at Rs. 6,86,961 against Rs. 6,98,304 at the close of the preceding year, showing a decrease of Rs. 11,343. In the balance of surplus and obsolete stores there was a slight reduction from Rs. 3,085 to Rs. 2,572.

Assessment and Collection of Taxes.

15. The number of properties on the Assessment Book increased from 63,843 in the previous year to 64,670 in the year of report. 6,558 properties were exempted from the General Tax as being of insignificant value against 6,518 in the year previous, and 2,444 non-Municipal properties were exempted under Section 143 of the Municipal Act against 2,279 in the preceding year. Under the same Section, 1,869 Municipal properties were not assessed, being 125 more than in the previous year. The net result was an increase of 497 in the total number of properties assessed to the General Tax from 53,302 in the previous year to 53,799 in the year of report.

16. The year under review witnessed an unprecedented advance of Rs. 1 crore and 34½ lakhs in the rateable assessment of properties. During the previous year it had risen from Rs. 5,88,81,972 to Rs. 6,12,34,537. In the year of report it rose to Rs. 7,46,87,830. Of the increase of a crore and 34½ lakhs in the assessment over that of the preceding year, about Rs. 47 lakhs are accounted for by the Port Trust properties and nearly 10 lakhs by new buildings erected on the City Improvement Trust estates, the rest of the increase being due to increased assessments following on the rise in rents throughout the City. Opening with a gross assessment of Rs. 7,34,77,310, the year closed with an assessment of Rs. 8,29,75,130 against Rs. 6,80,28,001 at the end of the year previous. 4,975 complaints against assessments were made during the year against 3,608 in the preceding year. Only 19 appeals were made to the Chief Judge of the Court of Small Causes, of which 14 were settled out of Court or withdrawn by the appellants; in one case the valuation was reduced by the Court, in two cases the appeals were dismissed and court costs awarded to the Municipality and in the remaining two cases the appeals are pending.

17. Inclusive of demands in respect of previous years amounting to Rs. 64,026 the total demand on account of property taxes aggregated Rs. 1,28,45,207 against Rs. 1,00,53,359 in the preceding year showing a large increase of Rs. 27,91,848. Out of this, Rs. 1,22,13,501 were collected against Rs. 99,54,938 in the preceding year. Despite an excess collection made of Rs. 22,64,563 over that of the year previous, the outstanding balances on account of property taxes amounted to Rs. 6,25,706 against Rs. 64,026 in the preceding twelve months. The net outstanding balances should, however, be taken at only Rs. 1,70,847, as a sum of Rs. 4,32,395 due by the Port Trust was paid by them on the 31st March 1919 after bank hours, and bills aggregating Rs. 22,464 were recalled and cancelled.

18. The claims for drawback admitted during the year numbered 2,719 against 4,053 in the previous year, and the amount of drawback allowed aggregated Rs. 44,322 against Rs. 67,898 in the preceding year.

19. The receipts from the General Tax inclusive of Fire Tax aggregated Rs. 75,04,011 against Rs. 56,91,393 in the previous year, showing a large increase of Rs. 18,12,618. There was, also, a substantial increase of Rs. 2,79,882 in the receipts from the Water Tax, which amounted to Rs. 29,77,602 against Rs. 26,97,720 in the preceding year. The Halalkhore Tax, inclusive of charges for special service, likewise yielded an increased revenue of Rs. 18,34,067 against Rs. 16,13,123 realized in the year previous.

20. The receipts from the Wheel Tax aggregated Rs. 5,80,140, exclusive of Rs. 24,500 derived from the right of collecting tolls at the Mahim and Sion Causeways, against Rs. 5,64,601 realized from the tax in the year previous. During the year 3,525 four-wheeled vehicles were taxed against 3,471 in the preceding year and 3,437 in the year 1916-17, and 1,201 two-wheeled vehicles against 962 in the previous year. There was, however, a substantial increase in the number of motor cars taxed during the year, which rose from 2,003 in the previous year, to 2,332 in the year of report. 341 motor cycles were taxed during the year against 307 in the previous year.

21. The gross collections from Town Duties for the year aggregated Rs. 40,90,800 against Rs. 45,55,335 in the previous year and the refunds allowed in respect of goods exported amounted to Rs. 23,71,991 against Rs. 23,43,240. The net revenue thus amounted to Rs. 17,18,809 against Rs. 22,12,094, showing a decrease of Rs. 4,93,285 which is due to decreased imports of wines and spirits, sugar, ghee and timber.

Public Works.

General Branch.

22. Numerous projects relating to markets, cemeteries, stables, chawls, ward offices, staff quarters, hospitals, primary schools, sanitary conveniences, etc., engaged the attention of the Executive Engineer's Department in the year of report and plans and estimates were prepared, but the actual works had in many cases to be held in abeyance partly for want of funds and partly on account of high prices of labour and materials, excessively high rates of tenders, etc. The construction of a market on the west side of the Musjid Bunder Station was practically completed, and the work of constructing masonry stalls in the vegetable section of the Arthur Crawford Markets was in progress. Out of the two sheds sanctioned to be constructed at the Bandra Slaughter Houses for the protection of animals, one was built departmentally and the construction of the other was entrusted to a contractor. Considerable portions of the Hindu cemetery and of the Roman Catholic cemetery at Haines Road were filled in. The works of constructing chawls for the Health Department biggaries of F Ward at Dadar and of laying the foundations and plinth of the second chawl for halalkhores at Valpakhadi were nearly completed. The work of constructing four European wards, mortuary, kitchen and stores, etc., at the Arthur Road Hospital was entrusted to a contractor and tenders were invited for the construction of the Resident Medical Officer's and Nurses' quarters and Administration Block at the hospital. The work of constructing three large additional wards at the hospital for enlarging the accommodation therein was in progress at the close of the year of report and has since been completed. The construction of two wards at the Acworth Leper Asylum at Matunga was also completed. The erection of an Observation Shed at the Sankli Tank Bullock Hospital was carried to completion. Good progress was made with the work of converting Falkland Road and Northbrook Gardens into play grounds and the Hanging Gardens at the Malabar Hill were extended further towards the Tulsi Pipe Line. The building and repair works carried out through the agency of the petty works contractor amounted to Rs. 74,527. The registration of the class and floor area of tenements in new and altered buildings in the city started in 1914 was continued, and 1,188 buildings were surveyel during the year for the purpose, the number of buildings surveyed since the commencement of the work totalling 5,646. The work of revision of the valuation of Municipal properties, which has been in hand since October 1912, was in progress during the preceding year. Its further progress is not mentioned in this report but it is understood that the special staff engaged on the work have almost completed it and have unearthed much useful and valuable information.

Drainage.

23. The engines in the new pumping station at Love Grove worked satisfactorily but much trouble was experienced, as in the past, in the working of the pumps, owing to the acid nature of the sewage, which attacked the metal of the frames of the pumps. The old high outfall was walled up during the year and all sewage discharged through the new outfall. The pumps in the new pumping station were assisted by the old Worthington pumps for an aggregate period of 3,888 hours. Considerable trouble again arose in obtaining the required quantity and quality of coal. Rubble coal suited for mechanical stokers could not be obtained and the use of steam coal instead interfered with their action. Owing to war no progress could be made with the works of extension of the bucket and band conveyors and of removal and reconstruction of the retaining wall.

24. The work of constructing the New Low Level Outfall at Love Grove was continued during the year and a further length of about 175 feet was constructed as against 226 feet in the previous year, thus making a total length of 1,968 feet of the outfall from the Engine House. The storm-water sluices at Love Grove and Worli worked satisfactorily and there was no flooding in the vicinity of the Worli storm-water channel during the monsoon. The chains and

other iron work of the sluices, which had, however, become corroded owing to the combined influences of the atmosphere and sea water, were renewed. Signs of decay are also visible in the wood work which will have to be repaired at no distant date.

25. The Love Grove Air Compressor Station, worked satisfactorily, but the increased running of the Compressor Engines necessitated by the increased amount of sewage pumped of late by the Shone System resulted in two crankshafts breaking through fatigue. The necessary repairs were made and the machinery was again put in good running order. The Colaba Air Compressor Station also worked satisfactorily, the only mishap being the breakage of a crankshaft due to an old flaw. The damage has been made good. The electric plant at Colaba was assisted for some time by the steam plant as in the preceding year. The ejectors connected with these stations did not give much trouble during the year of report though many of them have become very old and numerous working parts had to be renewed.

26. The work of renewing the 15" cast iron sealed sewage main in Fergusson Road which was commenced in the year 1916-17 was completed during the year of report. Numerous works in storm-water drains were undertaken with a view to preventing or abating the serious floods occurring annually in different parts of the City during the monsoon. Among the works completed or well in hand were the construction of storm-water drains in Annesley Road, Parel Road from Chinchpokli Road to Connaught Road and Currey Road, Victoria 3rd Cross Lane, Alli Umer Street and Musjid Street, Khetwady 6th and 8th Lanes, Charni Road and part of Girgaum Back Road, Hospital Lane, Dadyset Agiary Street and Cavel, portion of Girgaum Road between New Wady to Thakurdwar Road and Nepean Sea Road. Pipe sewers were laid in a passage near Saitan Chowky at Khed Gully, Worli Road, Reay Road and in two private streets at Fergusson Road. Pipe sewers were also laid in Mahim District and the work of constructing a septic tank and hopper near the foreshore at Mori Road was completed. The work of constructing an ovoid sewer from Matunga Station to the north of Dadar Station was in progress. The stoneware pipes in the Colaba Sectional District were replaced by cast iron pipes.

27. The question of the drainage of the North of the Island has been engaging the attention of the Corporation for a number of years and the scheme prepared for the purpose has necessitated frequent reconsideration and modification in the light of varying data and changed conditions of the City. With a view to expediting the final settlement of the scheme to be adopted, the Commissioner has through the kind offices of the Bombay Government and the Secretary of State for India arranged to secure the services of Mr. John D. Watson, M. Inst. C. E., Engineer to the Birmingham and District Board, who is an expert on the subject, to advise the Corporation in the matter. The Commissioner has also been authorized by the Corporation to consult Dr. Gilbert J. Fowler of Bangalore on the treatment of sewage by the activated sludge and allied chemical and mechanical processes.

28. Out of 120 miles of pipe sewers, 13·12 miles of ovoid main sewers and 152 miles of storm-water drains, 33·06 miles of pipe sewers, 11·75 miles of ovoid sewers and 38·25 miles of strom-water drains were cleaned, the quantity of silt removed being 2,147, 250 and 11,918 tons respectively.

29. During the year 289 street connections were made against 247 in the preceding year, at a cost of Rs. 17,513. In addition to these, 122 storm-water connections were made (costing Rs. 4,276) against 162 in the preceding year. 14 manhole frames and covers were provided over some of the storm-water drains in the City. 1,691 improved concrete covers were provided over storm-water entrances, the total number of covers fixed since their introduction in the year 1913 being 8,090. These covers have proved effective in arresting the breeding of mosquitoes.

Streets and Buildings.

30. 2,668 building applications were received during the year against 3,105. 460 notices were issued for the removal of unsafe structures against 524 in the preceding year. Of these, 365 were complied with, 15 were either cancelled or withdrawn, in one case departmental action was taken, and 79 cases were pending at the close of the year. 9 buildings or parts of buildings fell during the year against 26 in the year preceding. In 7 cases no injury was done and in the remaining 2 cases 8 persons were injured and 1 killed. Action was taken for the removal of 220 inflammable and insanitary huts, of which 187 were removed, notice in regard to one case was cancelled and 32 cases were pending at the close of the year. 20 notices were issued, under Section 378 of the Municipal Act, for the improvement of insanitary buildings. In 13 cases the owners complied with the requisitions, and the remaining 7 cases were pending at the close of the year. Out of 12 cases of unauthorized works, for the removal of which the sanction of the Standing Committee was obtained, in 2 cases permission was granted to retain the works, in 6 cases the works were removed by the owners, in 2 cases the works were removed by the Municipality and the remaining 2 cases were pending at the close of the year. In all 1,019 prosecutions were instituted against 832 in the previous year. 441 cases were withdrawn on compliance with the requirements of the Department. In 189 cases the parties were warned and discharged, while 366 persons were convicted and fined, and 23 cases were pending at the close of the year.

31. The area of roads metalled and patched during the year was 3,742,068 square feet against 5,728,899 square feet, and the total amount spent on repairs and maintenance was 6,57,183 against Rs. 6,19,628, the rate for full metalling working out at 1 anna and 9 pies per square foot against 1 anna per square foot in the preceding year. The higher rate for the year under review was due to the greatly increased cost of labour, materials and labour carts and to the increased average depth of metal laid on roads, which was 2½ times that laid in the year 1917–18. On the basis of the average depth of metal laid during the last mentioned year, the cost per square foot, however, works out at 8·9 pies per square foot as against 1 anna for that year, which indicates that the rate for the year under review is not really higher than that of the year previous. Although the supply of materials was ample, considerable difficulty was experienced on account of scarcity of labour and cartage and lack of a sufficient number of heavy rollers. Despite this difficulty, great progress was made and substantial improvement effected. Several miles of roads were brought to a proper camber preparatory to receiving a finished coat of tarred material. Eight roads or portions of roads covering an area of about 1,54,000 square feet were provided with rubble bottoming and the work of providing cement concrete bottoming on a further portion of Frere Road was in progress. Out of 171 miles of roads, 32 miles were disturbed in connection with pipes, cables, &c., against 22¾ miles in the preceding year. The operations of the Tramways Co., the Gas Co., the Telephone Co., and the Tata Hydro-Electric Co. were responsible for the disturbance of about 12 miles. The further extension of the wood pavement in Frere Road could not be carried out as wood blocks required for the purpose could not be obtained. The wood-paving laid three years ago on the road is still in excellent condition.

32. The work of cutting down a further portion of Sewri Cemetery Road so as to bring it to the level of the adjoining roads was in progress and that of lowering a portion of Musjid Bunder Road was practically completed. Most of the properties required for the construction of a new straight road from the junction of Purbhadevi Road and the proposed Foras Road to join Cadell Road were acquired and the construction of the road commenced. The widening of Nesbit Road except the portion passing through Mangalwadi was completed and that of Worli Road was in progress. Improvement of Queen's Road and of the surroundings of the Church Gate Station was well in hand. About 1,850 square yards of land was thrown into the roadway by enforcement of set-backs in the different parts of the City. The lands and buildings

required for the widening of the Church Gate Street, Sonapur Lane, Musjid Bunder Road, Nakhoda Street and Abdul Rehman Street were being acquired. Five new streets were taken over from the City Improvement Trust. With a view to taking systematic action for the improvement of private streets and lanes in the City under Section 305 of the Municipal Act, a special staff was engaged from 1st July 1918 and the work since done is reported to have had a marked effect on the cleanliness of the areas dealt with and to have added immensely to the comfort and convenience of the residents of localities hitherto uncared for. The work of improving five private streets was completed during the year. Out of these five streets and those improved previously, 5 were declared public streets under Section 306 of the Municipal Act. In fifteen more cases action has been commenced under Section 305 and in three other cases under Section 377 of the Act. On sixteen roads new footpaths were formed and the footpaths existing on eight roads were paved. 488 new road-side trees were planted in various roads. 16 street-refuges with gas lamps were provided on 6 roads and 3 tram shelters were erected, one at Crawford Market and two at Dhobi Talao.

Tramways.

33. The double tram track along Girgaum Road was extended to Lamington Road, a distance of about 900 feet, and single track loop lines about 3,012 feet in length were laid at Rampart Row, Tardeo Tram Terminus and Soparibaug Road. The total number of cars run by the Tramways Company on their lines was 221 of the aggregate carrying capacity of 11,702 passengers, against 196 cars in the previous year of the total carrying capacity of 10,454 passengers.

Overbridges.

34. No appreciable progress was made during the year by the Railway Companies towards the construction of the remaining overbridges required on their lines. Perhaps they are awaiting the return of favourable circumstances to take the works in hand. But the construction of the Delisle Road Overbridge and the Dadar Overbridge can hardly brook any further delay.

Lighting.

35. 6,692 gas lamps were maintained during the year at a cost of Rs. 4,56,782 including the cost in respect of 14 electric lamps near the Wellington Fountain. The number of kerosene oil lamps was 1,174 on which the net expenditure was Rs. 34,781. The number of additional lamps provided during the year was small, there being a net increase of only 5 in the number of gas lamps and 22 in the number of kerosene oil lamps as against an increase of 164 and a decrease of 37 lamps respectively during the preceding year. The net cost of maintenance was Rs. 16,618 in excess of that of the previous year. The restrictions placed by the Coal Controller on the consumption of coal having been removed, the 2-light lamps on Cadell Road and Lady Hardinge Road and the high pressure lamps in the City are being burnt to their full candle power.

Workshops.

36. The value of departmental and private work turned out at the Workshops has been computed at Rs. 4,07,262 against Rs. 2,93,611 during the preceding year, the net result of the year's transactions being a balance of Rs. 26,743 in favour of the Workshops against Rs. 12,228 in the year previous. These figures indicate a considerable increase in the amount of work turned out at the Workshops. The New Workshops at Foras Road still continues to be incomplete, owing to the inability of the contractors to deliver all the machinery contracted for. The Municipal Inspection motor-cars covered 31,925 miles at a running cost of 5·11 annas per mile as compared with 5·14 annas in the preceding year.

Water Works.

37. The Water Works were maintained in a state of efficiency throughout the year. The work of replacing the old timber and tiled roof over the filters and reservoirs at Malabar Hill by a cement concrete roof was in progress. It has, however, been considerably delayed owing to the restrictions placed by the Ministry of Munitions on the supply of cement. The work of building residential quarters for the Hydraulic Engineer near the north end of the reservoir was taken in hand. With a view to enabling the Corporation to properly consider the question of augmenting the water supply of the City by bringing in additional water from the Tansa lake, preliminary surveys of the areas through which a third Tansa main could be laid were begun. The Tansa supply was twice sterilized during the prevalence of two cholera epidemics during the year by treating the water with chlorine. The Vehar water was similarly sterilized during the first epidemic, but during the second epidemic it was thought unnecessary to do so. The Tulsi water was not chlorinated, as the chances of its pollution were regarded as comparatively remote owing to the entire catchment area of the lake being Municipal property and uninhabited. The installation of mechanical filters at the Tulsi lake for filtering its water and the construction of tanks, reservoirs, etc., required in connection therewith were taken in hand about three months before the close of the year, but owing to the outbreak of influenza and the difficulty of obtaining labour, cartage and materials, little progress could be made. During the year a scheme was formulated for supplying water to Salsette, from the Powai Lake upto a maximum of two million gallons per day and for utilizing an additional million gallons for augmenting the supply of water to Bombay, and preliminary arrangements were made for carrying out the necessary works of raising the height of the dam, installing pumping and filtering plants, etc.

38. Owing to the failure of the monsoon, the rainfall at all the three lakes, Tansa, Tulsi and Vehar, was much below the average of the last five years. At Tansa Lake the rainfall was 61·83 inches against 116·79 inches in 1917 and was 43 per cent. below the average for the preceding five years ; at Vehar it was 42·05 inches against 117·78 inches in 1917 and was 58·60 per cent. below the average ; at Tulsi it was 57·84 inches against 138·28 inches in 1917 and was 45 per cent. below the average. Tansa Lake overflowed continuously from the 18th August to 10th September 1918. Tulsi and Vehar Lakes did not overflow.

39. 405 new water connections were made and 80 were cut off for various reasons, of which 65 were restored. There were therefore 26,222 connections against 25,832 at the close of the preceding year. Of these, 2,030 were metered against 2,204 in the year 1917-18.

40. 12,043 underground and 16,809 aboveground leaks or defects were detected and remedied by the Waste Prevention Branch of the Water Works Department. In the latter figure are included 11,378 taps found out of order and 148 taps left open. Owing to these leaks or defects water to an extent of about 1,170,220 gallons per hour was running to waste. In the preceding three years about 886,895, 2,005,265 and 1,996,720 gallons of water per hour was found running to waste owing to such defects. These figures are the aggregate totals of water running to waste owing to a great number of leaks detected and do not mean that this quantity of water was actually running to waste at those high rates at any one time throughout the year, yet the leakage stopped by the Water Department was very considerable. Although it may not be possible to ascertain definitely how much water must be running to waste in the City every day owing to defects remaining still undetected, yet it will not be wrong to assume that the quantity must be very large, and the necessity for the adoption of more vigorous measures to detect and remedy all such defects as soon as possible need not therefore be too strongly emphasized.

The length of main examined for the first time during the year of report was 6,651 feet, but the length of main subjected to second and subsequent tests was 1,840,228 feet against 2,412,403 feet in the preceding year. The total length of mains of all sizes sounded was 123 miles and 4,090 feet. The work of renewing and enlarging existing water mains in the City and of laying additional mains was resumed during the year and about 1·6 miles of new pipes were laid.

Fire Brigade.

41. Throughout the year the Fire Brigade was maintained in a state of thorough efficiency. There were 437 calls to fires, of which 38 were false alarms. The fire alarm system continued to work satisfactorily. Of the 437 calls to fires, about 50 per cent. were received through fire alarms, proving their great utility. Erection of 25 additional alarms is now in hand and it is expected that the whole system will be in working order shortly. The actual number of fires was 291 against 290 in the previous year. Of these, 147 fires were extinguished by the Brigade and 145 were extinguished before its arrival. The total damage to property by fire is estimated at Rs. 41,52,374 against Rs. 20,22,278 in the preceding year, showing an increase of Rs. 21,30,096. This large increase was due mainly to the huge cotton fire at Prince's Dock on the 13th November 1918 which alone was responsible for a damage estimated at Rs. 16,15,250 and to the several other large fires that followed the signing of the Armistice. Of the total amount of damage, Rs. 37,16,928 represented insured, and Rs. 4,35,446 uninsured property. Five persons lost their lives at the fires during the year and seven persons received such injuries that they subsequently succumbed thereto. The Brigade attended at 8 cases of fallen houses, where a child aged seven years lost her life by being overwhelmed, 18 persons were rescued alive by the Brigade and 12 received slight injuries. It was also summoned on two occasions to recover bodies of 2 persons fallen into wells.

Public Gardens.

42. The number of visitors at the Victoria Gardens in the year of report was 1,558,334 against 1,555,865 in the year previous, showing a slight increase of 2,469. The number of band performances at the Gardens was 16, the same as in the previous year, whilst the performances at the Esplanade and Chowpatty Bandstands were 43 and 15 against 47 and 9 in the previous year, respectively. Substantial improvements were carried out in the Gardens to render them more attractive, and they were kept in good condition inspite of deficient supply of water due to the failure of the monsoon. Good progress was made during the year towards completing the scheme of superficial drainage of the Gardens.

43. The most remarkable event in the Victoria Gardens was the birth of a female Zebra on the 30th August 1918. It is believed to be the first instance of a Zebra being bred in this country. Among other additions to the Zoo at the Victoria Gardens may be noted two pairs of African lions, one pair of tigers and a tiger cub presented by the Dungarpur State through Major D. M. Field, Political Agent, Rajputana, a Persian Gazelle by Mr. Haji Suleman Abdul Wahed, one Indian Gazelle by the Lady Superior, Parel Convent, and one more by Mr. A. A. Baig, and two Indian Sloth Bear cubs by Mr. R. C. Thompson, and one by Mr. E. M. Kierander. The best thanks of the Municipality are due to these donors for their valuable gifts. The visitors who patronize the elephant rides given in the Gardens were sorely disappointed to find themselves deprived of their pleasure towards the end of the year as the elephant got very seriously ill with diarrhœa followed by Zerbad, a very fatal disease amongst elephants. The elephant has, however, fortunately recovered from the illness under proper treatment and nursing.

44. VICTORIA AND ALBERT MUSEUM.—The Museum was open to the public during 311 days of the year. The total number of visitors was 954,483 against 883,914 in 1917-18, giving a daily average of 3,069 against 2,824 in the preceding year. At the request of the Bombay War Museum Committee a collection of war exhibits were accommodated in the Museum building for about four months before it was removed for exhibition at the Freeman Thomas Hospital. The work done by the Museum staff in sorting out the specimens and arranging them suitably on stands and in show cases was well appreciated by the Museum Committee. Twenty photographic views of Old Bombay were purchased and added to the collection in the Old Bombay Room. Several portraits of notable Indians who figured prominently in the history of Bombay were secured for hanging on the walls in the Museum. The development of the industrial section received special attention during the year and two cases, one containing specimens of Plumbago and the articles made of it, and the other containing specimens of Glass manufactured in the Bombay Presidency and other parts of the country, were made.

Health Department.

45. In the year of report (1918) the City was overwhelmed by the ravages of a series of epidemics—Cholera, Small-pox, Plague aud Influenza. Cholera assumed epidemic form twice during the year, and so did Influenza. The four epidemics together lasted for over 39 weeks out of 52 weeks of the year. The total number of deaths from all causes rose from 33,390 in the previous year to 58,388, being the highest ever recorded during the last seventeen years, giving a death-rate of 59·61, against 34·09 in the preceding year. It may, however, be noted that this figure of 58,388 includes 3,274 deaths among new arrivals not belonging to the City. The toll taken by each of the principal diseases except Plague and Malaria, moreover, was higher than that of the year 1917 and also higher than the quinquennial average of the years 1913-17. It was likewise higher than the decennial mean of the years 1908-17 except in regard to Plague, Malaria, and Diarrhœa and Dysentery. The unfavourable sanitary conditions of the City during the year were aggravated by the scantiest rainfall known in the history of the City since the year 1905. It was only 35·54 inches, being about half the normal (71·15) and the lowest since 1905 (33·66).

46. 21,733 births were registered during the calender year 1918 against 21,651 during the preceding twelve months. The birth-rate for the year was 22·18 against 22·10 in 1917 and was higher than in any previous year since 1905. The number of registered births does not, however, represent the whole of the infant population of Bombay, inasmuch as a considerable number of children of mothers belonging to the City but born outside it and brought into the City after birth is not registered. During the year under review 5,210 such children were vaccinated. Taking these into account as well as those who may have escaped registration, the probable infant population of the City has been computed at 29,504, giving a birth-rate of 30·12.

47. After a series of steady improvement up to the year 1915, the general mortality of the City rose from 23,681 in that year to 30,574 in 1916, to 33,390 in 1917 and to 58,388 in 1918. This growing impairment of public health in recent years has been attributed by the late Executive Health Officer, Dr. Turner, largely to the conditions and circumstances arising out of the War. He observes—

"In Bombay, while overcrowding increased apace, large sanitary works and improvement schemes were held up owing to the financial stringency induced by the War. Public bodies and Sanitary authorities could not raise loans necessary to meet the capital expenditure on large works, nor could they, owing to the difficulty of importing plant and material and the abnormal rise in prices, substitute modern sanitary methods of improvement in sanitary and conservancy arrangements of the City to the extent and at the pace required, nor could they call upon house-owners to carry out the necessary improvements except in the most urgent cases. Thus the proposals regarding drainage, quick transport of refuse, incineration, sanitary disposal of carcasses, housing of the labour staff, demolition of houses and rooms, and the conversion of basket privies into water closets except in the very worst cases, the improvement of insanitary areas and more stringent building bye-laws, had all to

be deferred to a more convenien time to be ushered in by the close of the War and the return of normal conditions. Meanwhile the insanitary conditions went on intensifying to the great detriment of public health until the inevitable retribution followed in a series of epidemics which characterized the year under report."

The effects of War conditions were further heightened in the year 1918 by the influx of unhealthy, weak and suffering persons from famine-stricken districts and by deficient water supply. Now that the war is happily over, it may be hoped that all large works and sanitary improvements which had hitherto to be deferred will soon be taken in hand and pushed on vigorously and that the steady improvement of public health which was arrested and so grievously retarded during the last three years will soon be restored and continued unhampered.

48. Of the 58,388 deaths, 1,662 were ascribed to Cholera which was the first of the four epidemics that visited the City. It was prevalent throughout the year except in October and assumed epidemic proportions in January and again in December. In addition to the usual sanitary measures, prompt measures were taken to bring the disease under control by organizing popular lectures, putting up posters, and distributing leaflets advising the people as to the steps to be taken, and by offering free anti-cholera inoculation at the Municipal dispensaries and at other important places. "Compared with the previous epidemics of the disease since the Health Department was established in 1865, this epidemic which lasted for 11 weeks (December 1918 to February 1919) was," says Dr. Turner, "in point of duration next only to that of 1916 (15 weeks) and in point of mortality unapproached by any that has preceded it."

49. Small-pox was the second epidemic to visit the City and accounted for 1,024 deaths. It was prevalent throughout the year and became epidemic in February and continued so till about the middle of May. The usual facilities were provided for the vaccination of Hajis, and out of 1,361 pilgrims who left Bombay for the Haj in September and October, 1,060 were vaccinated in Bombay before embarkation. Facilities were also afforded to the public for vaccination and revaccination, and 63,271 persons were vaccinated. Of these, 18,100 were primarily vaccinated and 45, 171 revaccinated. The intensive incidence of this disease was manifest to a remarkable degree during the year among the Goanese subjects of the Portuguese Government as compared with the general population of Bombay. Dr. Turner, therefore, suggests in his report a reconsideration of the question of ensuring the proper protection of this section of the community by an amendment of the Bombay Vaccination Act or otherwise, and the Corporation would do well to take the subject again into their early consideration.

50. Plague which levied a toll of 1,024 deaths prevailed in the City in an epidemic form from the end of March up to about the end of May. The usual preventive and precautionary measures, *viz.*, inoculation, rat-destruction, evacuation and disinfection were continued during the year which was the 23rd year since its appearance in the City in the latter half of 1896.

51. The fourth and the most disastrous epidemic, which twice overwhelmed the City, was that of an Influenza-like fever, generally developing into Broncho Pneumonia. Besides being very infectious, the disease has a short incubation period of 12 to 24 hours and spreads rapidly once it is introduced. Its first inroad was in the latter half of June 1918, and although the epidemic lasted barely four weeks, it cost the City over 1,600 lives. The sickness-rate was so high as to dislocate business and trade. Those engaged in indoor occupations such as clerks, mill-hands, etc., suffered the most. The second onslaught of the disease was in the month of September in a pandemic form and wrought a havoc surpassing the ravages of the worst plague epidemic. On the 10th September the total mortality was about the normal. It rose to 219 on the 16th September, 314 on the 19th, 427 on the 23rd, 547 on the 27th, 682 on the 29th, and 712 on the 30th idem. The highest figure 768 was reached on the 6th October. During the worst plague epidemic in the City the highest total mortality on a single day was 433 on the 15th February 1900.

The total number of deaths registered under Influenza was 3,964 inclusive of about 1,640 deaths which occurred during the first prevalence of the epidemic. But this figure cannot be taken as correct, as during the 62 days of the prevalence of the epidemic from the 10th September to 10th November, the number of deaths that occurred above the normal (of about 90 for the time of the year) was 20,258. It appears, therefore, that many cases of deaths due to the epidemic were registered under other nomenclatures of diseases or that the epidemic had a very malignant effect on the virulence of other diseases. Probably both contingencies may have occurred.

52. When the mortality in the City began to increase day by day in the latter half of September and Influenza threatened to assume a pandemic form, the Medical Relief Committee of the Corporation held a meeting and, in consultation with the Commissioner and the Health Officer, decided to take measures on a vast scale. The Health Officer was requested to approach large employers of labour with a memorandum of his suggestions in regard to the precautionary and preventive measures to be taken by the people to ward off the disease. The Commissioner was also requested to engage, in addition to the staff under the Health Officer, as many additional medical men, Hospital Assistants and Senior Medical Students as may be considered necessary, to undertake a systematic house to house visitation at regular intervals, to render medical aid and advice to the patients suffering from the disease and to distribute suitable medicines free of charge to such patients as may be willing to take them. At the same time a Sub-Committee was appointed to assist the Health Officer in taking immediate steps to carry on a publicity-campaign in order to bring home to the people what the Health Officer considered necessary to control the epidemic. The Sub-Committee invited the co-operation of volunteers to supplement the work of the paid staff who could not cope with the enormous work that they were required to do. It is gratifying to note that not only did a large number of individuals volunteer their services to co-operate with the Health Department but important bodies, such as the Social Service League, the Humanitarian League, the Hindu Medical Association and the St. John Ambulance Brigade, organized their men and resources and carried on relief work in co-operation with the Health Department. The way in which the work was done has already been brought to the notice of the Corporation in an elaborate report from the Health Officer, No. H-14-B, dated the 25th November 1918, and the Corporation have duly acknowledged the services rendered by the Volunteers and Voluntary Organizations in their Resolution No. 8316, dated the 14th February 1919. As the Sub-Committee had various opportunities of personally seeing in what splendid manner these Volunteers had organised and carried out the relief-measures in different parts of the City and the way in which the work was appreciated both by the general public and the suffering patients, they were convinced that it was only through such voluntary organizations that the prejudices lurking in the minds of ignorant people as regards the relief-measures taken by the Municipality and the apathy of the suffering public towards the hospitals maintained by the Municipality could be removed and they could be made to avail themselves of the medical aid provided by the Municipality. They, therefore, invited the representatives of all the Voluntary Organizations to offer suggestions as to the steps that should be taken in the future if the City was again faced with a similar emergency. Thereupon a Committee was appointed to frame in consultation with the Health Officer, a scheme for the future working of the Volunteers and the Voluntary Organizations in conjunction with the Health Department and to arrange to place it before the Corporation through their Medical Relief Committee. A scheme was accordingly prepared and was forwarded by the Corporation to the Commissioner.

53. All communities registered an increase in the death-rate during the year as compared with the previous year. The lowest mortality recorded was among the Parsis, being 27·50 against 19·81 in the preceding year. The Europeans followed the Parsis with a death rate of 29·09 against 21·85 in 1917. The death rate amongst the Jews was the next lowest, being 40·16

against 24·10. Amongst the Eurasians it was 42·02 against 25·78, amongst the Indian Christians 53·66 against 31·83, and amongst the Mahomedans 61·18 against 34·46, in the previous year. If the small community of Buddhists, which recorded the unprecedented death-rate of 128·02 against 74·39 in 1917, be excluded, the Hindus recorded the highest death-rate of 62·64 against 34·46 in 1917. It must be noted that these percentages are based on the Census figures for 1911 and that consequently they are somewhat misleading.

54. The diseases of the Respiratory System exacted as usual the heaviest toll during the year, *viz.*, 23,487, against 11,231 in the preceding twelve months. This increase is due mostly to deaths from Influenzal Pneumonia having been returned as Pneumonia and classed under the Respiratory Diseases. Fevers occasioned the next highest number of deaths, *viz.*, 4,553, against 2,449 in 1917. Of these, 200 deaths were attributed to Malaria, being 62 less than in the year previous. If from these are deducted the 26 deaths in the different War Hospitals, 26 amongst the homeless, 1 imported case which terminated in death and 22 in the harbour, the number of deaths from Malaria in the City proper is reduced to 125. The usual anti-malaria operations were continued during the year. Owing to the reduction of these operations as compared with those of the years previous, the Special Department which was in charge of a Special Assistant to the Executive Health Officer since 1912 was partly reduced from the 1st September 1918 and the staff distributed amongst the Deputy Health Officers of the wards. Tuberculosis caused 2,513 deaths against 2,118 in the preceding year. With regard to this increased mortality Dr. Turner observes : " This increase does not necessarily signify a corresponding increase in the incidence of the disease. The fact is that modern methods of diagnosis have made it possible to identify the disease in its earlier stages, with the result that cases which under other circumstances would have been classed incorrectly as ' Fever ' and ' Bronchitis ' are now correctly diagnosed and shown as Tuberculosis." Measures for the prevention and treatment of tuberculosis are being taken vigorously by the King George V. Anti-Tuberculosis League in close co-operation with the Health Department. The opening ceremony of the Sanitarium for tubercular patients founded by the League on a hillock to the north-east of the Old Government House at Parel was performed by Their Excellencies Lord and Lady Willingdon on the 7th December 1918. Of the 2,513 deaths due to Tuberculosis, 2,246 deaths were due to Phthisis, being 371 more than in the preceding year.

55. In the year of report there were 12,829 deaths among infants upto one year of age, showing an increase of 3,959 over the high figure of 8,870 for the preceding year. The death-rate per mille of births registered was 590·30 against 409·6 in 1917. From the following statement given in the Health Officer's report, it will be observed that of the 21,733 live births registered during the year, 14,442 or 66·45 per cent. occurred in families living in a single room tenement or sharing it with others that the number of deaths among such was 11,081 or 76·72 per cent. of the births, that the proportion varied inversely as the number of rooms occupied, being 49·8 per cent. in the case of two-room tenements, 37·4 per cent. in the case of three-room tenements, and 23·8 in families occupying four or more rooms, and that the lowest percentage of the infant mortality (7·9) was among the children born in Hospitals :—

—	1 room and under.	2 rooms.	3 rooms.	4 or more rooms.	Road side.	Hospitals.	Total.
Births	14,442	2,117	515	578	30	4,051	21,733
Infant mortality	11,081	1,056	193	138	40	321	12,829
Infant mortality per 100 births registered 1918	76·72	49.88	37·47	23·87	133·83	7·92	59·03
1917	48·14	43·04	27·15	26·57	112·19	11·76	40·96

56. The Municipal Nurses and Midwives attended 1,382 confinements against 1,604 in 1917 and paid 23,883 house-to-house visits against 29,548 in the previous year. This decrease in work was due to the nurses having been detailed for duty at the Municipal Hospitals during the prevalence of epidemics. 648 women were admitted in the Municipal Maternity Home at Bellasis Road, of whom 600 were confined against 467 confined in the preceding year out of 512 cases admitted. The Home at Parel was taken over by the Municipality from the Lady Willingdon Scheme on 1st May 1918, and 220 women were confined in the Home from 1st May to 31st December out of 280 admitted during the period. The Home at Colaba, which was still under the management of the Lady Willingdon Scheme, being unfavourably situated had to be closed at the end of February 1919. Out of the donation of Rs. 5,00,000 received from the estate of the late Mr. Mahomed Haji Saboo Sidick through the kind offices of Her Excellency Lady Willingdon for the purpose of providing additional maternity accommodation one more Home was started from 1st June 1919 at Imamwada Road opposite the Mogul Musjid. Her Excellency Lady Lloyd having interested herself in the work started under the Lady Willingdon Scheme, a further step was taken by deciding to open " Infant Welfare Centres " in different parts of the City. The work to be done at these Centres is (1) Advice and instruction to mothers as to infant management, (2) Medical aid and advice for infants, (3) Day Nurseries (creches) and (4) Appropriate home visiting. One such Centre has already been opened at Sleater Road on 1st April 1919 and the Standing Committee hope that its work will meet with entire success and encourage its promoters to open many more centres in different parts of the City.

57. 107,745 persons availed themselves of the free medical aid given at the Municipal dispensaries against 102,921 in 1917. Of these, 2,851 patients were seen at their houses. The number of persons treated at the Aided Charitable Dispensaries at Colaba and Victoria Bunder was 7,961, of whom 23 were seen at their houses. 1,932 notifications of Infectious Diseases were received during the year from Medical Practitioners against 1,673 during the preceding twelve months.

58. A League for combating Venereal Diseases was inaugurated in the year 1917 at the instance of the Bombay Sanitary Association. Since February 1918 the League has run a Dispensary at Lamington Road well equipped with all the necessaries for free diagnosis and treatment of Venereal Diseases by modern methods. This work was possible through the generosity of the Western India Turf Club who gave a donation of Rs. 30,000 which was subsequently supplemented by a further donation of Rs. 5,000. The Corporation have given a donation of Rs. 7,500 towards the expenses of the work done by the League. During a year's period 964 patients took advantage of the League's Dispensary, showing that it was a great desideratum.

59. Owing to the outbreaks of epidemics in quick succession during the year as noted above, an enormous amount of work was thrown on the authorities in charge of the Municipal Infectious Diseases Hospitals. There were 3,322 admissions to the Arthur Road Hospital against 958 in the previous year. Of these, 1,411 were cases of Small-pox, 1,192 of Influenza, 497 of Cholera, 70 of Chicken-pox, 20 of Measles, and 6 of Erysipelas. 1,016 cases proved fatal, 327 being Small-pox cases, 384 Influenza, 283 Cholera and 1 Measles. There was no fatality amongst the Chicken-pox and Erysipelas cases. The incidence of Small-pox mortality amongst the vaccinated and the unvaccinated was 12·4 and 38·5 per cent. respectively, proving as usual the efficacy of vaccination in reducing the case-mortality rate amongst those protected by it. The admissions to the Maratha Hospital numbered 1,198 against 797 in 1917. Of these, 328 were Plague cases, 246 of Mumps, 157 of Influenza, 133 of Chicken-pox, 56 of Measles, 29 of Small-pox, 22 of Relapsing fever and 21 of Whooping cough. In all 349 cases proved fatal. Of these, 263 were cases of Plague, 4 of Mumps, 32 of Influenza, 4 of Measles, 4 of Small-pox, 3 of Relapsing fever, and 1 of Whooping cough. There was no fatality amongst the Chicken-pox cases.

60. 6,386 articles were examined in the Municipal Laboratory during the year, showing an increase of 1,536 in the number of samples examined during the year previous. Of the 6,386 samples examined during the year, 1,677 were examined chemically and 4,709 bacteriologically. 2,916 lbs. of rat poison were prepared in the Laboratory during the year against 2,436 in 1917. 2,610 capillary tubes of Glycerinated Vaccine were examined for the presence of pathogenic micro-organisms, before being used for the Vaccination Department, and in none of the tubes the organisms were detected.

Licenses.

61. Despite a small decrease in the number of lincenses from 12,430 in the previous year to 12,158 in the year of report the receipts advanced from Rs. 1,29,484 to Rs. 1,30,321, the largest ever realized. 1,010 prosecutions were instituted during the year and the total amount of fines inflicted was Rs. 20,181.

Markets.

62. The receipts from the Markets and Slaughter Houses increased from Rs. 6,67,522 in the previous year to Rs. 7,28,672. This enhancement was principally due to circumstances arising from the demands of the Military authorities. There was also an increase of Rs. 4,152 in the receipts from Stall Rents and Squatters' Fees collected departmentally.

63. The quantity of unwholesome food destroyed during the year was 388,946 lbs. against 323,092 lbs. in the preceding year. The quantity of contraband meat seized and destroyed was 8,583 lbs. against 7,708 lbs. in 1917-18.

64. Twelve cheap grain shops were opened by the Municipality in various parts of the City and two carts were also fitted up as travelling shops. Grain worth about Rs. 46,115 was sold at cost price between June 1918 and March 1919. This measure seems to have given some relief to the poor.

Primary Education.

65. Despite the peculiarly adverse circumstances of the year under review, brought on by outbreaks and recurrence of several epidemics as already noted and by strikes of mill-hands, the administration of primary education in the City showed continued progress on the whole. 22 new schools were opened, 9 Marathi (including one night school, on Nirashrit School and 2 Marathi mill-hands boys' schools), 3 Gujarati and 10 Urdu. The number of Municipal Schools for the Depressed Classes increased from 16 to 17 and of night schools from 5 to 6. It is a matter for special satisfaction to note that the largest number of new schools opened during the year was on the Urdu side and that 7 out of the 10 new Urdu schools were Girls' Schools. In all 2,237 pupils attended the Schools for Depressed Classes and the mill-hands schools and the night schools which are all free schools, and slates and writing materials were supplied gratis to the pupils of the two kinds of schools named first above. The rates of fees at the Girls' Schools are everywhere half of those charged for boys and the elastic system of free studentships introduced in the different schools according to the needs of the different localities ensures that in no Municipal school is a poor boy refused admission for inability to pay his fees.

66. There were in all 233 schools with 26,832 pupils against 211 schools with 28,377 pupils in the preceding year, showing a decrease of 1,545 pupils. These figures are for the 31st of March for each year. The Schools Committee attribute this decrease in the number of pupils to the prevalence of epidemics and to strikes of mill-hands and point out that the number has since gone up and that in August 1919 it was 28,498. It is interesting to observe that the decrease was wholly on the side of Marathi and Gujarati Schools, while the Urdu Schools showed an increase of 463 pupils. The number of aided

schools increased from 156 to 163 and the number of pupils attending these schools rose from 15,907 to 16,181. These aided schools received a total grant-in-aid of Rs. 85,373 against Rs. 70,282 in the preceding year. The Schools Committee's receipts for the year aggregated Rs. 8,83,348, and the expenditure was Rs. 8,53,437 against Rs. 6,95,243 in the year previous, the increase being due to the opening of new schools, provision of better quarters and equipment for some schools, employment of 96 additional teachers and of several special teachers for teaching special subjects, and the enlisting of additional schools for grants-in-aid.

67. The ratio of trained teachers to untrained teachers was 321 to 269 in Marathi Schools. In the Gujerati schools, however, it was 177 to 105 and in the Urdu schools 46 to 245. Efforts to increase the proportion of trained teachers were continued during the year with the result that at the end of the year there were 544 trained teachers out of 1,163 as against 459 out of 1,067 at the end of the previous year, showing an increase from 43 to 47 per cent.

68. Owing to conditions arising out of the war, no progress could be made with the work of constructing additional school buildings. 18 old schools were however removed to better premises and additional accommodation was rented for 16 schools.

69. The experimental measures sanctioned by the Corporation for the medical inspection of Municipal school children for an additional period of three years commencing with the 1st March 1917 were continued during the year. In all 9,338 children of 117 schools were examined. Of these, 6,534 were primarily examined and 2,804 re-examined. In all 6,465 were found to have some defect or ailment. Most of the children were found to be suffering from malnutrition and from diseases of eyes, teeth and throat. Out of 2,804 re-examined children, about 1,304 were found to be improving, some in the same condition and a few gone worse. Intimations regarding ailments of the children examined were sent to their parents.

Conclusion.

70. In conclusion the Standing Committee have much pleasure in putting on record their high appreciation of the able and successful administration of Municipal affairs by Mr. P. W. Monie, I.C.S., during the year which inspite of adverse circumstances was marked with substantial advancement in all directions of Municipal activities.

MUNICIPAL CORPORATION OFFICE,
BOMBAY, 11*th February* 1920.

VASANTRAO ANANDRAO DABHOLKAR,
Chairman, Standing Committee.

Annual Administration Report of the Municipal Commissioner for the City of Bombay for the year 1918-19.

I.—Corporation and Standing Committee.

The Corporation.

1. Mr. Rahimtulla Currimbhoy, B. A., was appointed President of the Corporation at the meeting held on the 4th April 1918, and he held that appointment throughout the year.

2. Ninety-two meetings of the Corporation and ninety-five meetings of the Committees of the Corporation, other than those of the Standing Committee, were held.

3. The changes that took place during the year in the personnel of the Corporation were as follows :—

Mr. Joseph Baptista, L. C. E. (Bom.), B. A., LL.B. (Cantab.), Bar-at-Law, resigned on the 18th September 1918 and in his place Mr. Shankar Sambhaji Gangla, B. A., was elected by the ratepayers of E Ward on the 18th October 1918.

Dr. Hooseinbhoy Abdool Kadar Nakhoda, L. M. & S., who was elected by the ratepayers of B Ward, died on the 17th February 1919. His seat remained vacant upto the end of the year.

Mr. Jehangir Dossabhoy Framji, I. S. O., who was appointed by Government, resigned on the 30th January 1919. His seat remained vacant upto the end of the year.

Mr F. A. M. H. Vincent, M. V. O., resigned on the 31st December 1918, and in his place Mr. F. C. Griffith, was appointed by Government on the 21st February 1919.

Mr. A. H. Whyte resigned on the 9th January 1919, and in his place Rao Bahadur Sakharam Vishwanath Rajadhyaksha, L. C. E., was appointed by Government on the 21st February 1919.

4. Mr. Joseph Baptista, L. C. E. (Bom.), B. A., LL. B.(Cantab.), Bar-at-Law, was absent from the meetings of the Corporation for reasons approved by the Corporation under Section 17 (*b*) of the Municipal Act, from the commencement of the year upto the 18th September 1918, when he resigned.

The Standing Committee.

5. Dr. S. S. Batliwala, L. M. & S., was appointed Chairman of the Standing Committee at the meeting held on the 2nd April 1918, and he held that appointment throughout the year.

6. There were fifty-two regular meetings and two special meetings of the Standing Committee and thirteen meetings of the Sub-Committees thereof.

7. There were forty-nine attendances of members for the audit of Municipal Accounts and ninety-nine for cheque signing.

8. The changes that took place during the year in the personnel of the Standing Committee were as follows :—

Mr. F. A. M. H. Vincent, M. V. O., resigned on the 18th January 1919, and in his place Mr. F. C. Griffith was appointed by Government on the 21st February 1919.

Mr. A. H. Whyte resigned on the 11th January 1919, and in his place Rao Bahadur Sakharam V. Rajadhyaksha, L. C. E., was appointed by Government on the 21st February 1919.

9. The following is the list of Municipal Councillors who held office on the 31st March 1919 :—

MR. RAHIMTULLA CURRIMBHOY, B.A., J.P., *R* (F Ward); *President*.

†ABDUL SATAR AYUB GAYA, DR., L.M. & S., *R* (B Ward).
BALKRISHNA WASSOODEW PANDOORUNG, MR., J.P., *G*.
BARNARD, R. C. H., MR., J.P., *G*.
BEHRAMJI NAVROSJI GAMUDIA, MR., B.A., J.P. *R* (A Ward).
‡§‖ BHALCHANDRA KRISHNA BHATAWADEKAR, SIR, KT., L.M., J.P., *R* (D Ward).
*BYRAMJEE R. B. JEEJEEBHOY, MR., J.P., *J*.
CASSAMALLY JAIRAJBHOY PEERBHOY, MR., J.P., *J*.
CHANDRASEN DWARKADAS, MR., *R* (C Ward).
†§ CHIMANLAL H. SETALVAD, SIR KT., B.A., LL.B., J.P., *U*.
‡CHUNILAL VIJBHUKANDAS MEHTA, THE HON'BLE MR., M.A., LL.B., J. P., *J*.
‡ COWASJI JEHANGIR READYMONEY, MR., O.B.E., B.A. (Cantab.), J.P., *J*.
*‡ DAVID, SASSOON, SIR, BART., J.P., *G*.
‖ D'MONTE, D. A., DR., M.D., L.R.C.P. (London), L.M. & S., M.R.C.S., J.P., *G*.
DINSHA BAMANJI PESTANJI MASTER, DR., L.M. S., J.P., *R* (C Ward).
†‡§ DINSHA EDALJI WACHA, THE HON'BLE SIR, KT., J.P., *R* (A Ward).
DINSHAW MANOCKJI PETIT, THE HON'BLE SIR, BART., J.P., *J*.
**FAZULBHOY CURRIMBHOY EBRAHIM, THE HON'BLE SIR, KT., C.B.E., J.P., *R* (G Ward)
GORRIE, H. T., MR., J.P., *C.C*.
GRIFFITH, F. C., MR., J.P., *G*.
HAJI SULEMAN ABDUL WAHED, MR., J.P., *G*.
†HIRALAL DAYABHAI NANAVATI, MR., B.A., LL.B., *R* (C Ward).
HOOSEINBHOY ABDOOLABHOY LALJEE, MR., *R* (B Ward).
HOOSEINALLY MAHOMEDBHOY RAHIMTOOLA, MR., B.A., *R* (B Ward).
HUGHES, R. D., MR., J.P., *J*.
*H. P. MODY, MR., M.A., LL.B., *R* (D Ward).
JAMSETJI ARDASEER WADIA, MR., J.P., *J*.
JAMSETJI JEJEEBHOY, SIR, BART., J.P., *J*.
JEHANGIR BOMANJEE PETIT, MR., J.P., *R* (D Ward).
†JEHANGIR J. CURSETJI, DR., M.D., L.R.C.P., L.R.C.S., *R* (C Ward).
JENKINS, J. D., THE HON'BLE MR., J.P., *G*.
KARAMALLY PEERBHOY HAJI, MR., *R* (B Ward).
KAVASJI EDALJI DADACHANJI, DR., L.M. & S., J.P., *R* (D Ward).
KHIMJI HIRJI KAYANI, MR., J. P., *R* (B Ward)
LISTON, W. G., LT.-COL., C.I.E., M.D., D.P.H., I.M.S., J.P., *J*.
**McBAIN, J. A. D., MR., C.I.E., J.P., *R* (A Ward).
MADHAVJI VIRJI, MR., B.A., LL.B., *R* (A Ward).
MAGANLAL DALPATRAM KHAKHAR, MR., J. P., *R* (C Ward).
MAHOMEDBHOY CURRIMBHOY EBRAHIM, MR., J.P., *G*.
MAHOMED HAJEEBHOY, THE HON'BLE MR., J.P., *J*.
*MAHOMED HUSEN A. HAVELIVALA, MR., BAR.-AT-LAW, J.P., *R* (E Ward)
MANAJEE RAJOOJEE KALEWAR, RAO SAHEB, *R* (E Ward).
†MIRZA ALI MOHAMMED KHAN, MR., M.A., LL.B., J.P., *G*.
MAHOMED ISMAIL CURTAY, MR., *R* (C Ward).
†MORESHWAR CHINTAMAN JAVLE, DR., J.P., *R* (G Ward).
MULJI B. BARBHAYA, MR., J.P., *G*.
†NAIRSHAW H. E. SUKHIA, DR., L.M. & S., L.V.SC., F.R.S.I. (London), J.P., *R* (A Ward).
† NARAYAN VISHVANATH MANDLIK, MR., B.A., LL.B., J.P. *J*.
*NISSIM, MEYER, MR., M.A., J.P., J.
ORR, J. P., MR., C.S.I., C.B.E., I.C.S., J.P., *G*.
‖PHIROZE CURSETJI SETHNA, THE HON'BLE MR., O.B.E., J.P., J.
POONSEY HIRJI MEISHERI, DR., L.M. & S., J.P., *R* (B Ward).
RAHIMTOOLA MEHERALLY CHINOY, MR., J. P., *G*.
RAJARAM TUKARAM, MR., M.B.E., *R* (A Ward)
*† RAMCHANDRA BHASKER MANTRI, MR., J.P., *R* (D Ward).
† RAMKRISHNA SHRIKRISHNA NAVALKAR, MR., B.A., LL.B., *R* (C Ward).
* RATANSI A TEMULJI NARIMAN, DR., M.D., F.R.M.S., J.P., *J*.
SAKHARAM VISHVANATH RAJADHYAKSHA, RAO BAHADUR, L.C.E., J.P., *G*.
* SALEBHOY KARIMJI BARODAWALLA, THE HON'BLE MR., J.P., *R* (E Ward).
SHANKAR SAMBHAJI GANGLA, MR., B.A., *R* (E Ward)
SHELLIM, D. S., MR. J.P., *J*.
‡SHEPHERD, W. C., MR., I.C.S., J.P., *G*.
SHERIF DEVJI CANJI, THE HON'BLE MR., *R* (B Ward).
* SHIAVUX SORABJI BATLIWALA, DR., L.M. & S., J.P., *R* (F Ward). (*Chairman, Standing Committee.*)
SORABJI CURSETJI DHONDY, MR., *R*. (E Ward).
SUNDERRAO DINANATH NAVALKAR, MR., M.R.A.S.E., *R* (C Ward).
TEMULJI BHIKAJI NARIMAN, SIR, KT., L.M., F.C.P.S., J.P., *U*.
‡ TOD, A. M., MR., J.P., *CC*.
*‖ VASANTRAO ANANDRAO DABHOLKAR, MR., J.P., *G*.
VITHALRAO KRISHNAJI VANDEKAR, RAO BAHADUR, J.P., *J*.

NOTE.—The letters against the names signify—*R*, that the Member was elected by the Ratepayers; *J*, by the Justices of the Peace; *CC*, by the Chamber of Commerce; *U*, by the University; and *G*, appointed by Government.

NOTE.—The marks against the names signify—*, Member of the Standing Committee; †, Member of the Schools Committee; ‡, Member of the Board of the City of Bombay Improvement Trust; §, Member of the Board of the Victoria Jubilee Technical Institute; ‖, Representative on the Board of Management of the Acworth Leper Asylum at Matunga; **, Representative on the Board of Trustees of the Prince of Wales Museum of Western India.

10. I held charge of the office of Municipal Commissioner throughout the year.

II.—Heads of Departments.

11. Mr. R. P. Masani, M. A., Municipal Secretary, was on combined leave for 12 months from the 24th June 1918 and Mr. A. A. Moulvi, B. A., Assistant Municipal Secretary, acted for him.

12. Mr. N. Maughan, M. Inst. C. E., M. R. San. Inst., Deputy Executive Engineer, Drainage, proceeded on combind leave for 8 months from the 18th March 1919 and Mr. D. D. Daruwala, L. C. E., A. M. Inst., C. E., M. R. San. Inst., Special Drainage Assistant Engineer, acted for him.

13. Mr. L. W. Michael, Superintendent of Markets, was on privilege leave from the 8th July 1918 to the 22nd August 1918 and Mr. Thomas Rodrigues, G. B. V. C., Senior Assistant to Superintendent of Markets, acted for him.

14. Mr. R. G. Robottom, Assistant Assessor, First Grade, who was appointed as Deputy Assessor and Town Duty Refund Officer on the 1st April 1918, continued in the appointment upto the 8th January 1919, when he was appointed as Deputy Controller of Rents and Mr. E. M. Taleyarkhan, Assistant Assessor, acted for him.

15. Mr. Cecil L. Burns, Curator and Secretary, Victoria and Albert Museum, retired on the 1st April 1918 and Mr. E. R. Fern was appointed in his place.

16. Mr. C D. Mahalaxmiwalla, Superintendent of Gardens, retired on the 16th April 1918 and Mr. Jamshed M. Doctor, C. M. Z. S., Assistant Superintendent, Zoological Collection, was appointed in his place.

17. Mr. D. G. Padhaye, M. A., Secretary, Schools Committee, was on privilege leave from the 4th June 1918 to 27th July 1918 and Mr. A. R. Bhaiji, B. A., Superintendent of Municipal Urdu Schools, was appointed to act for him.

18. Mr. David Robertson, A. C. A., Deputy Accountant, continued to be on Military duty throughout the year.

19. Rao Saheb B. Ramrao, Assistant to Commissioner and Superintendent of Printing and Stationery, retired on the 3rd April 1918 and Mr. K. P. Guzder was appointed in his place.

20. The following officers continued in their respective appointments throughout the year :—

Dr. J. A. Turner, C.I.E., M.D., D.P.H., Executive Health Officer.

Mr. James W. Mackison, B.Sc., M. Inst.C.E., Executive Engineer.

„ F. R. Melville, B.Sc., A.M I.C.E., Resident Engineer, Love Grove Outfall Works, and Deputy Executive Engineer, Roads.

„ E. Gordon Cameron, Deputy Executive Engineer, Mechanical Branch.

„ H. J. Trivess Smith, M.I.C.E., M.I.M.E., Hydraulic Engineer.

„ W. E. Waite, Chief Accountant.

Khan Bahadur B. D. Banaji, Assessor and Collector.

Mr. T. C. Greenop, Chief Officer, Fire Brigade.

„ H. Wald, Superintendent of Licenses.

„ E. J. Hale, Storekeeper.

III.—Financial.

I.—General.

21. The financial position of the Corporation continues to be satisfactory. The year's accounts show an increase in the revenue, the net result of the transactions for the year being a surplus of Rs. 3,47,536 thus :—

	Rs.
Revenue	1,73,74,185
Expenditure	1,70,26,649
Total Rs.	3,47,536

22. The year opened with a working cash balance of Rs. 71,61,781, including Rs. 11,17,198 being renewals of grants for 1917-18 and previous years, Rs. 6,98,304 the value of stores in hand, Rs. 1,00,000 the minimum cash balance required by law, Rs. 11,52,687 the contribution payable to the C. I. Trust in the year under report, and closed with a balance of Rs. 75,09,317 of which Rs. 13,67,073 represents grants for 1918-19 and previous years to be renewed, Rs. 6,86,961 the value of stores in hand, Rs. 1,00,000 the minimum required to be reserved under the Municipal Act, Rs. 15,19,800 contribution payable to the C. I. Trust in 1919-20 and Rs. 86,001 the amount advanced for the purchase of plant and machinery.

II.—Income.

23. The rates of taxation were the same as in the preceding year. The income was, however, Rs. 25,44,798 more than in 1917-18, the chief increase being under (1) General Tax Rs. 18,12,618, (2) Wheel Tax and Tolls Rs. 17,664, (3) Water Tax Rs. 2,79,882, (4) Halalkhore Tax Rs. 2,20,945, (5) Market Receipts Rs. 49,702, (6) Miscellaneous Receipts Rs. 1,51,338, (7) Interest on Surplus, &c., Funds, Rs. 64,346.

24. There was a decrease of Rs. 85,722 in Town Duties. The variations have been fully dealt with by the Chief Accountant in paras. 18 and 19 of his report, in which he, as usual, makes an estimate of our income which may be expected permanently to recur. It will be seen that for the year under report this expansion is estimated at Rs. 14,50,000. With this increase of income there was a corresponding increase in the incidence of taxation per head. It works out to Rs. 15-14-2 against Rs. 13-9-4 in the previous year.

25. As compared with the revised estimates, the actual receipts were in excess by Rs. 3,22,335 due, as explained in para. 17 of the Chief Accountant's report to (1) erection of new buildings in the City, (2) increase in ground rent and unexpected sales of land and (3) excess receipts from interest on investments of loan balances.

III.—Expenditure.

26. The total expenditure for the year was Rs. 1,70,26,649, or Rs. 27,65,257 more than in the preceding year. The principal increases were Rs. 26,628 under "General Superintendence," Rs. 35,732 under "Fire Brigade," Rs. 7,19,574 under "Public Works," including New Works," Rs. 3,89,353 under "Health Department," Rs. 1,35,804 under "Markets and Slaughter Houses," Rs. 2,35,708 under "Primary Education," Rs. 42,758 under "Hospitals," Rs. 54,574 under "Contribution to C. I. Trust," Rs. 3,59,529 under "Miscellaneous," including War Allowance, Grain Compensation, &c., Rs. 2,44,195 under "Debt" and Rs. 6,34,256 under "Depreciation on Government Paper held in Surplus Funds." The decreases were under "Secondary Education" Rs. 40,095, Rs. 11,005 under "Pensions & Gratuities" and under "Miscellaneous" Rs. 70,938. The

details will be found in para. 11 of the Chief Accountant's report. The Chief Accountant estimates the annual recurring permanent increase in expenditure at Rs. 13,16,000 (*vide* para. 33 of his report) against a permanent increase in income of Rs. 14,50,000.

27. Excluding Rs. 6,34,256 specially voted for writing off the depreciation in 3½ per cent. Government Paper held in Surplus Funds, the expenditure amounted to Rs. 1,63,92,393 against sanctioned grants aggregating Rs. 1,81,14,585. There was thus an unexpended balance of Rs. 17,22,192 of which grants aggregating Rs. 13,67,073 require to be renewed, leaving a net saving of Rs. 3,55,119. The savings in expenditure and renewals of grants have been dealt with in paras. 25-27 of the Chief Accountant's report.

28. The additional grants sanctioned during the year aggregated Rs. 21,02,650 against Rs. 8,71,039 in the preceding year. The increase was largely due to the special grant of Rs. 6,52,670 made for writing off the depreciation on Government Paper held in Surplus Funds, and to extra grants made to meet heavy expenditure necessitated owing to the war and to epidemics, as follows :—

Rs. 2,76,404 on account of war allowance to the staff, Rs. 2,94,400 for higher rates of road materials, Rs. 2,36,450 for rebate allowed to the Port Trust for 5 years ending 31-3-19 on account of high cost of materials used for roads in their charge, Rs. 1,79,200 for higher prices of fodder, Rs. 1,10,000 for Influenza and Cholera Epidemics and Rs. 35,000 for contributions to the Anti-Tuberculosis league.

29. The details of the principal grants will be found in para. 23 of the Chief Accountant's report.

IV.—Loan Works Expenditure.

30. The expenditure on Loan Works executed out of Loan Funds amounted to Rs. 22,10,033 against Rs 12,51,212 in the preceding year, an increase of Rs. 9,58,821 principally under buildings and Sanitary Structures, Roads and Overbridges and Drainage Works. There were many variations both on the original and revised estimates as pointed out by the Chief Accountant in para. 44 of his report. The total outlay on Loan Works carried out of Advances from Surplus Cash Balance amounted to Rs. 5,20,135. Against this, there were credits amounting to Rs. 8,69,088 on account of adjustment of expenditure against the new loan of Rs. 30 lakhs raised during the year. Thus there was a net credit of Rs. 3,48,953.

V.—Plague Expenditure.

31. The expenditure on Plague operations during the year amounted to Rs. 1,26,506 showing a decrease of Rs. 5,654 on the expenditure for the previous year. From the first outbreak of plague upto the close of the year under report, the total outlay aggregates Rs. 84,86,063.

VI.—Capital Debt.

32. To carry out the programme of loan works, Rs. 30 lakhs were borrowed during the year from the Bank of Bombay on the security of 12 months' bills at a discount of Rs. 5¼ per cent. per annum free of Income Tax to the Bank. The payment made by the Municipality during the year towards the reduction of debt amounted to Rs. 2,36,995. Thus the Capital liabilities of the Corporation were increased on account of the raising of the above loan from Rs. 7,41,43,634 to Rs. 7,69,06,638. Against this debt, the total Sinking Fund invested upto 31st March 1919 amounted to Rs. 2,14,19,974 and the outstanding debentures of the Drainage Loan of 1878 redeemable on or prior to 1st January 1919 and covered by renewed grant aggregated Rs. 52,500, leaving a net debt liability of Rs. 5,54,34,165.

33. The different Sinking Fund Investments at 31st March 1919 have been shown in para. 41 of the Chief Accountant's report.

VII.—Assets and Liabilities.

34. The Revenue and Capital Assets of the Municipality at the close of the year as compared with the preceding year stand as follows :—

	At the close of 1917-18.			At the close of 1918-19.			Increase.
	Revenue.	Capital.	Total.	Revenue.	Capital.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assets	1,03,75,881	10,81,82,701	11,85,58,582	1,11,21,725	11,32,94,369	12,44,16,094	58,57,512
Liabilities	54,83,985	7,58,58,923	8,13,42,908	64,99,281	7,86,21,928	8,51,21,209	37,78,301
Excess of Assets over Liabilities ...	48,91,896	3,23,23,778	3,72,15,674	46,22,444	3,46,72,441	3,92,94,885	20,79,211

The distribution of the assets is given in paras. 47 and 49 of the Chief Accountant's report.

Suspense Account.

35. There was a profit in the Workshops during the year of Rs. 30,546 as against Rs. 12,233 for the preceding year.

Stores Account.

36. The balance of Reserve Stock on 31st March 1919 amounted to Rs. 6,86,961 against Rs. 6,98,304 at the close of the preceding year, thus showing a decrease of Rs. 11,343. There was a further reduction in the balance of Surplus and Obsolete Stores.

Street Improvements.

37. The total liabilities after allowing for time-barred claims on account of set-backs amounted to Rs. 7,90,146 upto 31st July 1919, against which the sanctioned funds aggregate Rs. 1,22,525. To this has to be added a sum of Rs. 27,551 realized by the sale of set-forward lands and permissions granted to houseowners to build within the regular lines of the streets. There is thus a net excess of Rs. 6,40,070.

Miscellaneous Funds.

38. The Municipal Fire and Accident Insurance Fund stood at Rs. 2,70,309 at the close of the year, the Worn Out Water Mains Renewal Fund at Rs. 6,38,718, the Net Premia Fund at Rs. 3,84,943 and the Lands and Buildings Fund at Rs. 3,56,336 (*vide* Appendix No. IV of the Chief Accountant's report). The investment of these funds being in 3½ per cent. Government Paper, the market value of these securities is less than the figures shown above. This information will be found in Appendix No. 5 A of the Chief Accountant's report.

Fire Tax.

39. The surplus to the credit of the Fire Tax amounted to Rs. 99,279 at the close of the year (*vide* para. 72 of the Chief Accountant's report).

40. The comparison of the net revenue and net expenditure for 1917-18 and 1918-19 is shown below in accordance with the Standing Committee's Resolution No. 12212, dated 3rd February 1892.

Particulars.	1917-18.			1918-19.		
Net Revenue after deducting Refunds, Drawbacks, and charges in respect of Assessment and Collection, and granting of Refunds.	Rs.	a.	p.	Rs.	a.	p.
General Tax	53,17,932	2	1	70,83,481	7	3
Fire Tax	—7,125	15	8	21,667	14	2
Wheel Tax and Tolls	5,79,952	13	2	5,98,455	9	4
Town Duties	18,01,131	15	7	17,11,503	3	7
Receipts from Government for Liquor Licenses and Tobacco Duties	5,15,040	12	2	5,29,759	2	5
Water Revenue (net)	3,59,309	6	2	5,28,784	11	5
Market Receipts	4,12,074	2	2	3,36,253	5	6
Returns from other Property and Miscellaneous	4,67,106	1	2	5,21,649	13	2
Net Receipts ... Rs.	94,75,421	4	10	1,13,31,555	2	10
Net Expenditure after deducting Receipts.						
General Superintendence	3,05,950	7	0	3,17,977	5	6
Public Gardens	66,929	0	8	73,884	4	0
Public Works (Engineering Department excluding Water Works)	24,99,361	13	11	30,72,060	13	2
New Works (excluding Water Works & Fire Brigade)	1,59 430	1	3	2,22,602	6	7
Public Health Department (excluding Markets)	4,98,208	0	1	7,01,417	6	4
Plague Expenses	1,32,160	6	1	1,26,506	4	4
Education-Primary	6,44,000	0	0	8,79,707	10	2
Do. Secondary	87,582	11	11	47,500	0	0
Hospitals	4,36,570	0	0	4,89,328	0	0
Pensions, Gratuities and Compassionate Allowances	1,31,637	1	0	1,16,673	2	10
Contribution to the City Improvement Trust	10,98,112	14	3	11,52,687	2	5
Municipal Debt (excluding Water Works & Fire Brigade) ...	23,63,205	6	10	24,64,696	6	7
Miscellaneous	4,42,879	3	4	6,77,402	11	10
Depreciation on Government Paper held in Surplus Funds	.....			6,34,255	14	0
Investment of the sale proceeds of Municipal Lands into the Municipal Lands and Buildings Fund	41,398	13	7	7,319	10	7
Net Expenditure ... Rs.	89,07,425	15	11	1,09,84,019	2	4
Surplus	5,67,995	4	11	3,47,536	0	6
Total ... Rs.	94,75,421	4	10	1,13,31,555	2	10

41. The Revenue, Expenditure and Balances of the last five years have been contrasted in the following table :—

	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	Rs.	Rs.	Rs.	Rs.	Rs.
Revenue	(*a*) 1,24,13,366	1,38,31,070	1,40,48,739	1,48,29,387	1,73,74,185
Expenditure	1,24,53,191	1,28,03,870	(*b*) 1,42,14,292	1,42,61,391	(*c*) 170,26,649
Closing balance (including advances to Loan Works, Reserve Stock, &c., and excluding Minor Deposits, &c.)	57,32,139	67,59,339	65,93,786	71,61,781	75,09,317
Add—Recoverable Revenue outstanding ...	48,400	32,000	45,000	60,927	(*d*) 6,07,207
	57,80,539	67,91,339	66,38,786	72,22,708	81,16,524
Deduct—Uncompleted Works, &c., and unexpended balances of the grants which were required for payment in the following year ...	10,65,310	9,98,762	8,69,495	11,17,198	13,67,073
Net working Balance available for the requirements of the following year	47,15,229	57,92,577	57,69,291	61,05,510	67,49,451

(*a*) In this year the Fire Tax was reduced from ½ per cent. to ⅜ per cent. and Water Tax from 3-3/8 per cent. to 3 per cent.

(*b*) Includes Rs. 1,20,312 and Rs. 2,98,135 for Discount on the Conversion of 3 per cent. and 3½ per cent. Government Paper into 4 per cent. Conversion Loan of 1916-17 and for the creation of the Municipal Lands and Buildings Fund, respectively.

(*c*) Includes Rs. 6,34,256 for write-off of the depreciation on 3½ per cent. Government Paper held in Surplus Funds.

(*d*) Includes Rs. 4,52,395 on account of arrears of General Tax for 1918-19 due by the Port Trust.

VIII.—Revenue Audit.

42. The demands, collections and outstandings at the close of the year were duly checked with the Assessor and Collector's books. The number of claims sanctioned for refund on account of vacancy under Sections 174 to 179 of the Act and on account of overcollection amounted to 772 representing Rs. 26,567-14-8. The claims to 1/5th drawback under Section 158 (2) scrutinized aggregated 6,120 of which 2,719 were admitted. It was ascertained from the Assessment Book that no property liable to any authorized tax or charges leviable in lieu thereof had escaped assessment. The vehicle and animal tax book was also examined in detail. The revenue from the tax on Public Land Conveyances licensed by the Commissioner of Police under Act VI of 1863 was audited and certificates of issue of licenses supplied by that Officer were checked with the Registers kept in this office. The revenue receipts and vouchers of the different departments were examined in detail and the collections paid into the Treasury were duly verified.

IV.—Assessment and Collection of Revenue.

43. The figures for the year under review are abnormal, owing to the revision of assessments during the currency of the year and the completion of the assessment of the Alexandra and Hughes Docks and the Port Trust Railway.

44. The total demand, taxation being at the same rates as in the previous year, was as follows :—

	Demand. Lakhs.	Increase over 1917-18. Lakhs.
General tax	70·72	12·99
Water tax	28·80	2·48
Halalkhore tax	18·64	2·50
	118·16	17·97
Corresponding figures for 1917-18	100·19	5·23

45. The balance uncollected at the end of the year was 6·14 lakhs or 5·2 per cent. of the total demand against ·64 per cent. last year. Excluding 4·32 lakhs paid by the Port Trustees after bank hours on the 31-3-19 and therefore treated as part of the income for the current year, the uncollected balance was 1·82 lakhs or 1·54 per cent. of the total demand.

46. The rateable value of properties increased during the year from 612·3 lakhs to 747 lakhs. Of this increase of 135 lakhs nearly 47 lakhs are accounted for by Port Trust properties and about 10 lakhs by new buildings built on City Improvement Trust lands, the rest of the increase being due to increased assessments following on the rise in rents throughout the City.

47. The increase in the rateable value in 1917-18 was 23·5 lakhs. The average annual increase for the 14 years ending 1917-18 was 21·5 lakhs; for the 14 years ending 1918-19 it was over 30·5 lakhs.

48. The tax on vehicles and animals yielded Rs. 3,12,875 or Rs. 28,105 more than in the previous year. The revenue from the toll at Mahim and Sion was Rs. 24,500 against Rs. 22,375 in 1917-18.

49. The incidence of taxation per head calculated according to the census figures, which last year was Rs. 13-9-4, increased to Rs. 15-14-2. Calculated on an estimated population of 12,00,000, the rate would be about Rs. 12-15-5.

Town Duties.

50. The figures for the year were, total collection Rs. 40,90,800, refunds Rs. 23,71,991 and net revenue Rs. 17,18,809 against Rs. 45,55,335, Rs. 23,43,241 and Rs. 22,12,094, respectively, for the previous year. The decrease of Rs. 4,93,285 in the net revenue was owing to decreased imports of sugar, wines and spirits, ghee and timber. The number of refund claims was 54,435 against 54,170 in the previous year.

V.—Public Works.

Municipal Building Construction.

51. The Executive Engineer's report gives details of works carried out or projected. A number of works had to be held in abeyance for various reasons such as high prices, lack of funds, excessively high rates of tenders, etc.

Overbridges.

52. The Currey Road overbridge has proved a very useful connection between Parel Road and DeLisle Road. In connection with the improvement of Mahaluxmi station, plans were forwarded by the B. B. & C. I. Railway Co. for an overbridge at Haines Road in addition to one at Clerk Road, for which the necessary land has already been acquired. The expenses incidental to the construction of an overbridge at Haines Road being found to be very heavy, a scheme for a single overbridge of adequate dimensions is under consideration. The properties required for the DeLisle Road overbridge have been acquired and the shifting of water and gas mains, drains, sewers and cables is in progress. Plans and estimates for the Dadar Road overbridge are still under preparation.

Roads.

53. Properties are being acquired for the widening of Church Gate Street. The through road from Worli to Mahim is under construction. The necessary land and buildings are being acquired for the widening of Sonapur Lane, Musjid Bunder Road, Nakhoda Street and Abdul Rehman Street. The work of improving the levels and gradients of Sewri Cemetery Road was in progress. The lowering of Musjid Bunder Road was practically completed. Five new streets of an aggregate area of 95,802 square feet were taken over from the City Improvement Trust. The widening of Nesbit Road, except the portion passing through Mingalwadi, was completed, and that of Worli Road was in progress. The set-backs enforced during the year resulted in an increase of 1,850 square yards to the road way. Ten private streets were converted into public streets by action under sections 305 and 306 of the Municipal Act, and an equal number were about to be taken over at the close of the year. In 15 more cases action under the above sections was commenced. Action was taken in respect of 3 private streets under section 317 (1*a*). In 6 cases the work of new private streets was undertaken by house owners under Municipal supervision (Section 303).

54. The area of roads metalled and patched during the year was 37,42,068 square feet as against 57,28,899 in the previous year, the cost, respectively, being Rs. 3,57,300 and Rs. 2,88,691. The rate for full-metalling worked out to Rs. 11-2-6 per 100 square feet, or anna one and pies nine per square foot, against Rs. 6-9-2 per 100 square feet, or anna one per square foot, respectively, last year. The higher cost last year is accounted for by much higher rates for materials, carts and labour, and by the fact that the average depth of metal was 2½ times that laid in 1917-18. Had the average depth of

metal been the same as last year the cost per 100 square feet would have been only Rs. 4-10-5 as against Rs. 6-9-2. Several miles of roads were brought to a proper camber preparatory to receiving a finished coat of tarred material. Rubble bottoming underneath 8 roads, aggregating about 1,50,800 square feet in area, was provided at a cost of Rs. 32,012. The length of road surface disturbed for laying drains, mains, cables, etc., was about 32 out of 171 miles of roads in the City, and the cost of restoration amounted to about Rs. 2,60,000. Road watering cost Rs. 1,40,000, *i.e.*, about Rs. 44,000 more than during the previous year chiefly owing to the scanty rainfall. The cost of painting roads with tar amounted to Rs. 1,47,310. Four hundred and eighty-eight trees were planted at a cost of Rs. 560. The conversion of the Falkland Road and Northbrook gardens into play-grounds was in progress. Sixteen street refuges and three shelters for tram passengers were erected. The footpaths of 8 roads were paved. On 16 roads footpaths were newly formed.

55. About 900 feet of a new double tram track was laid along Girgaum Road between Charni Road and Lamington Road, and about 3,012 feet of single track loop lines were laid at Rampart Row, Tardeo and Soparibag Road.

Public Lighting.

56. The total number of gas lamps at the end of the year was 6,692, 5 more, and of kerosine oil lamps was 1,174, 22 more than in the previous year. The total cost of gas lighting amounted to Rs 4,56,782 (including the cost of 14 electric lamps near the Wellington Fountain), and the net cost of kerosine oil lighting, to Rs. 34,780. Since the removal of the Coal Controller's restrictions, the two-light lamps in Cadell and Lady Hardinge Roads and the high pressure lamps in the City are being burnt to their full candle power. The difficulties of importing material owing to the war having continued, it was not possible to consider any radical improvement of the general lighting arrangements of the City.

Municipal Workshops.

57. The Municipal workshops were fully employed during the year in the repair of plant and machinery used by the different departments and in the manufacture of new articles. The estimated net profit was Rs. 26,713, the corresponding figures for the years 1917-18 and 1916-17 being Rs. 12,238 and Rs. 8,640, respectively. The bills preferred to the various departments amounted to Rs. 4,07,262 against Rs. 2,93,611 last year. These figures show a considerable increase in the amount of work turned out at the workshops. The difficulty in the way of obtaining the full complement of machinery since the erection of the new building at Foras Road still continues owing to the war.

58. The total mileage run by the Municipal inspection motor cars was 31,925 miles at an average cost of 5·11 annas per mile against 5·14 annas in the previous year.

59. As the Mechanical Engineer was unable, in addition to his ordinary duties, to deal systematically with cases of factories, etc., falling under sections 392-396 of the Municipal Act, an Inspector of Factories and a small staff was, with the sanction of the Corporation, appointed to assist him. The results achieved have been satisfactory.

Health Camps.

60. Health camps consisting of 220 rooms in all were erected in connection with plague and cholera cases. Previously existing Camps consisting of 248 rooms were continued to be maintained.

Private Buildings.

61. The number of applications for permission either to build or to rebuild houses, etc., was 2,668, against 3,105 in the previous year. 2,205 notices were issued to house owners under various sections of the Municipal Act. The number of prosecutions was 1,019 against 832 in the previous year. 441 cases were withdrawn on compliance with requisitions, 189 persons were warned and discharged, 366 were convicted, and 23 cases were pending at the close of the year. 460 notices were issued for the removal of unsafe structures. Of these, 365 were complied with, 15 were either cancelled or withdrawn, in one case departmental action was taken, and 79 were pending at the close of the year. Nine buildings or portions of them fell during the year. In 2 of these cases 8 persons were injured and one was killed. Action was taken in 220 cases for the removal of inflammable and insanitary huts. In 176 cases the requirements were complied with, in 11 cases the huts were removed departmentally and 32 were pending at the close of the year. In 12 cases applications were made to the Standing Committee for the removal of unauthorised huts. In 2 of these cases permission was granted, in 6 the owners themselves removed the work, in 2 it was removed by the Municipality and the remaining 2 cases were pending.

62. The total amount paid for the acquisition of set-backs was Rs. 3,52,127 of which Rs. 2,05,566 was paid from capital and Rs. 1,46,561 from revenue.

Drainage.

63. The beam engines in the new pumping station at Love Grove worked satisfactorily during the year. Much trouble was experienced owing to the acidity of the sewage which has attacked the metal of the frames of the pumps. During the year the old high outfall was walled up, and all sewage discharged through the new outfall. It was found necessary to assist the pumps in the new pumping station by bringing into use the old Worthington pumps for an aggregate period of 3,888 hours. The coal received during the year was of a very poor quality. The maximum amount of detritus recovered from the screening chamber in one week was 315 tons.

64. The construction of the new outfall at Love Grove was continued during the year. The total length of the twin-barrel steel pipe section constructed was 926 lineal feet and the outfall has been carried forward to a distance of 1,968 feet from the engine house. Owing to weather conditions which were similar to those prevailing in the previous year, work on the outfall was impossible for 211 days of the year, was possible on parts of 71 days and possible throughout the day only on 83 days. That even so the progress was more satisfactory than that made during the previous year is due to the fact that work is now being done in deeper water which permits of more frequent diving. Labour scarcity caused by epidemics hampered the work to a certain extent.

65. The Road Branch was supplied with 8,363 tons of metal and rubble by the outfall quarries.

66. The machinery at the air compressor stations at Love Grove and Colaba and the ejectors connected with these stations worked fairly satisfactorily during the year. At the Colaba station the steam plant was used for some time and consumed about 440 tons of coal.

67. The iron work of the storm water sluices at Love Grove and Worli, which was much corroded, was almost wholly renewed. The wood work is

also showing signs of decay and will have to be repaired extensively at an early date.

68. Of 10 of the larger works of providing storm water drains undertaken during the year, 6 were wholly and 4 partially completed, at a total approximate cost of Rs. 75,170 and Rs. 88,590 respectively. Of 5 pipe sewer works undertaken, all were completed at a total cost of about Rs. 72,590. Minor new works and works of repairs, alterations, etc., were carried out at a cost of Rs. 1,64,165. A storm water drain was laid in the Victoria Gardens to drain the ponds in which mosquitoes had been found to be breeding. The work of constructing an ovoid sewer from Matunga station to the north of Dadar station, for which an estimate of Rs. 3,68,0[illegible]6 was sanctioned by the Corporation, was carried out to the extent of Rs. 87,573.

69. 33·06 out of 120 miles of pipe sewers, 11·75 out of 13·12 miles of ovoid main sewers and 38·25 out of 152 miles of storm water drains were cleaned, the quantity of silt removed being 2,147, 250 and 11,918 tons respectively. 1,891 tons of silt were removed from catchpits on main and pipe sewers. 289 sullage connections and 122 storm water connections were made during the year.

Water Works.

70. Owing to the failure of the monsoon, the rainfall at the Tansa, Tulsi and Vehar lakes was below the average of the last five years by 43 per cent., 45 per cent. and 58·60 per cent. respectively, and only the Tansa lake overflowed.

71. Preliminary surveys with a view to obtaining information regarding the best method of increasing the supply from the Tansa lake were commenced.

72. During two cholera epidemics which occurred during the year, the water supplied from the Tansa and Vehar lakes was chlorinated. This was not necessary in the case of Tulsi water, as the entire catchment area of the lake is municipal property and uninhabited. The construction of mechanical filters at Tulsi and the various structures required in connection with them was commenced in January 1919. Owing to the influenza epidemic and the difficulty of obtaining labour, cartage and materials, progress was less satisfactory than was anticipated.

73. During the year, it was decided to utilise Pawai lake as a source of water supply to the inhabitants of Salsette, the surplus being used to augment the supply to Bombay. This will necessitate the raising of the dam, the installation of pumping and filtering plants and the laying of distribution mains. These works are now in hand.

74. The replacing of the old timber and tiled roofs over the filters and reservoirs at Malabar Hill by a cement concrete roof was in progress throughout the year. The work was considerably delayed on account of the restrictions placed by Government on the supply of cement.

General Stores Department.

75. The total value of general stores available for issue was Rs. 15,40,524, that of general stores issued (including transfers) Rs. 10,05,167, and the balance after adjustment of small discrepancies, Rs. 5,35,705. This is less by Rs. 7,833 than the balance in the previous year.

76. During the year 84 contracts for the supply of general and special stores were made. The market rates ruled high throughout the year.

77. The yearly verification of stores was taken in hand, but was not completed at the close of the year.

78. The value of the surplus and obsolete stores was Rs 2,572, *i.e.*, Rs. 517 less, and of those shown on the Line Suspense Account, Rs. 1,02,062, *i.e.*, Rs. 665 more than in the previous year.

Fire Brigade.

79. The Fire Brigade was maintained in a state of thorough efficiency throughout the year, although the staff was under strength owing to the series of epidemics.

80. There were 437 calls of which 38 were false alarms. The number of fires was 292, of which 147 were extinguished by the Brigade and 145 were extinguished before its arrival. The total number of fires last year was 290.

81. Nine of the fires were of a serious character involving the loss of property estimated at Rs. 31,74,700 out of a total estimated loss of Rs. 41,52,374 from all the fires. The last mentioned figure represents an increase of Rs. 21,30,096 over the previous year. Of this amount Rs. 16,15,250 are accounted for by one cotton fire at Prince's Dock.

82. Five lives were lost at fires, and seven persons received injuries to which they afterwards succumbed.

83. Assistance was rendered by the Brigade on eight occasions when buildings collapsed. The casualties were one child killed and 12 persons injured. Eighteen persons were rescued from the top floor of a three storeyed building.

84. One hundred and eighty-eight premises were inspected in connection with dangerous trades, etc., also 29 theatres, cinema halls, and circus tents, and 17 Military, Railway and Port Trust buildings.

85. Of the 437 calls to fires, 212 were received through fire alarms thus showing that their installation has been fully justified. The installation of 25 additional alarms is in hand.

86. Having regard to the intermittent water supply and low pressures necessitated by the failure of the monsoon, the water supply at fires was satisfactory. The attendance of the Water Department staff was also invariably prompt.

Public Gardens.

87. Ten public gardens were maintained during the year. As in previous years, no progress could be made towards completing the projected improvements to Victoria Place owing to conditions arising out of the war. The work of converting the Northbrook and Falkland Road gardens into playgrounds was much further advanced.

88. The number of visitors to the Victoria Gardens was 1,558,334, being 2,469 more than during the previous year. The reservation of the gardens on certain days for women and children only as an experimental measure was discontinued by the Corporation, as the attendance on those days was found to be small.

89. The labour supply in the Victoria Gardens was satisfactory owing to the increase in the pay of the malis. Water was very deficient owing to the failure of the monsoon. Progress was made with the drainage of the gardens.

90. There was no serious outbreak of infectious diseases amongst the animals in the Zoological collection. As in past years Col. Liston and his staff gave help and advice in performing *post-mortem* and bacteriological examination of dead animals at the Parel Laboratory.

VICTORIA AND ALBERT MUSEUM.

91. The Museum was open to the public on 311 days during the year. The total number of visitors was 9,54,483 against 8,83,914 in the previous year.

92. At the request of the War Museum Committee a collection of war exhibits was housed in the Museum building for about four months.

93. The descriptive catalogue of the Old Bombay Room which was completed last year was printed and published. Twenty more photographic views of old Bombay were purchased during the year. Several portraits of notable Indians who figured prominently in the history of Bombay were also obtained and added to the collection. Among the specimens added to the Industrial section was one presented by Mr. Cecil L. Burns, of old Bijapur embroidery of the 14th century. The Curator is endeavouring to make this section representative of the industries of the Bombay Presidency.

VI.—Public Health.

94. The total mortality during the year was 58,388 being 24,998 more than in 1917. This gives a death rate of 59·61 per 1,000 of population as against 34·09 in the previous year. Both the rates are based on the last census figure of 9,79,445 although the actual population was beyond any reasonable doubt much higher. Of the total number of deaths 3,274 were amongst persons not belonging to the City.

95. A succession of epidemics of cholera, small-pox, plague and influenza were the main causes of the abnormal increase of mortality. There were two outbreaks of cholera and two of influenza at short intervals. The influenza epidemic especially the second outbreak was of unprecedented severity. An appeal made for the co-operation of citizens met with a very gratifying response, and with the help of the various bodies and individuals who offered their services, the Health Department was able to organise relief measures on a considerable scale within a short time. The matter has already been reported on fully.

96. The number of deaths from malaria was 200, from other fevers 4,353, from small pox 1,024, from plague 1,143, from cholera 1,662, from measles 486, from tuberculosis 2,513, from influenza 3,964 and from respiratory diseases 23,487.

97. The number of births registered during the year, exclusive of still births, was 21,733, the highest recorded. This was 82 more than in 1917 and 1,229 more than the average of the decennium 1908-17. The birth rate per 1,000 of the population works out to 22·18 against 22·10 in 1917, and is higher than in any previous year since 1905.

98. The mortality among infants was 12,829, an increase of 3,959 over that recorded in 1917 and of 5,078 above the average of the quinquennium 1913-17. The rate of infant mortality on the number of births was 590·50 per 1,000 against 409·6 in 1917, the decennial average being 446·35.

99. Measures towards the reduction of infant mortality were continued with the aid of the Bombay Sanitary Association and the Lady Willingdon Scheme. Arrangements are being made to open 'Infant Welfare Centres' in different parts of the City.

100. The municipal nurses attended 1,382 confinements against 1,604 in 1917. Relief to poor women during confinement was given in 304 cases against 751 in 1917. The decrease is due to the withdrawal of nurses, &c., for attendance in Municipal hospitals during the prevalence of the epidemics.

648 women were admitted (600 confined) in the Municipal Maternity Home at Bellasis Road against 512 (467 confined) in 1917 and 280 women were admitted (220 confined) from the 1st May to the 31st December in the Home at Parel which was taken over by the Municipality on the 1st May 1918. A new home was opened at Imamwada shortly after the close of the year, in accordance with the arrangement under which Rs. 5 lakhs were handed over to the Municipality out of the estate of the late Haji Sabu Sidick.

101. Owing to the prevalence of small-pox in an epidemic form, a considerable amount of extra work (including that of propaganda) fell on the vaccination staff. The total number of vaccine operations performed was 63,278 against 40,194 in the preceding year.

102. The Malaria Branch of the Health Department created in 1912 having practically finished the main part of its work, was abolished as a separate branch from the 1st September 1918 and a small staff, distributed amongst the seven Deputy Health Officers, has been maintained for routine work.

103. The quantity of refuse dealt with by the Conservancy staff amounted to 6,26,958 carts against 7,15,034 in 1917.

104. There was a decrease of 8,543 night soil carts and 1,31,829 night soil baskets due in part to the conversion of basket privies into water closets. The number of water closets substituted for privies was 161 against 396 in 1917.

Licenses.

105. The total licence fees collected amounted to Rs. 1,30,321 against Rs. 1,29,484 during the preceding year. The fines inflicted by the Presidency Magistrates in 1,010 prosecutions conducted during the year amounted to Rs. 20,181. Eight more trades and commodities were made licensable during the year. Owing to increased work, an Assistant Superintendent, 2 Inspectors and 2 clerks were added to the staff from the 1st April 1919.

Markets.

106. The total revenue from Markets and Slaughter Houses amounted to Rs. 7,28,672 against Rs. 6,67,522 in the previous year, an increase of Rs. 61,150 of which the details are as under :—

Stall rents, and squatters' fees collected departmentally	Rs.	4,152
Squatters' fees from fish markets, scale fees, fair ground rent and feeding fees at the Bandra Slaughter Houses	„	12,863
Slaughter fees	„	44,446
	Rs.	61,461
Less—Decrease in miscellaneous receipts ...	„	311
Total	Rs.	61,150

107. The number of cows, bullocks and calves slaughtered was 84,749, of sheep and goats 8,36,355, and of buffaloes 11,003 against 67,476, 7,50,608 and 9,543 respectively during the previous year.

108. The percentage of horned cattle rejected was 1·61 against 1·47 in the previous year and that of sheep and goats 2·50 against 2·70. The number of buffaloes rejected was 8 out of a total of 10,898.

109. The total quantity of unwholesome food destroyed amounted to 3,88,946 lbs. against 3,23,092 lbs. in the previous year. The quantity of meat illegally imported into Bombay and seized and destroyed amounted to 8,583 lbs. against 7,708 lbs. in the previous year. The fines inflicted on such importers amounted to Rs. 1,655.

110. The supplies of mutton, beef, fish, fruit, vegetable, etc., were satisfactory.

111. The financial result of the working of the markets during the year showed a return of 8·87 per cent. on the estimated capital expenditure.

112. The Superintendent of Markets was allowed to serve as a member of the Committee under the Controller of Prices.

113. Twelve cheap grain shops were opened in various parts of the city, special funds having been sanctioned by the Corporation for the purpose. Two carts were also fitted up as travelling shops. Grain worth about Rs. 46,115 was sold at cost price. A system of sale on credit was introduced for the benefit of the Municipal peons and labour staff to enable them to buy grain on credit at these shops.

VII.—Education.

114. The total number of Municipal Schools at the close of the year was 233, 22 more than in the previous year. Of the latter, 4 are Marathi, 1 Gujarathi and 7 Urdu Girls' Schools; 1 Marathi, 2 Gujarathi and 3 Urdu Boys' Schools, and 4 Marathi Schools of a miscellaneous kind for mill-hand boys, &c. The total number of pupils was 26,832 against 28,377 in the previous year, and the number of teachers 1,163 against 1,067. The number of teachers of special subjects such as drawing, music, knitting, &c., increased from 47 to 59. In addition, there were 7 teachers of 4 Training Classes for teachers. The number of trained teachers increased from 459 to 514.

115. The total expenditure amounted to Rs. 8,53,437 showing an increase of Rs. 1,58,194 over that for the previous year. This was chiefly due to the employment of additional teachers, improved accommodation for schools, the opening of 22 new schools, equipment of existing schools, and increased grants given to aided schools. The average cost per pupil came to Rs. 28·6 against Rs. 22 in the previous year.

116. Additional accommodation was provided for 16 schools and 18 schools were removed to more suitable premises.

117. Out of 9,338 children medically examined, 6,465 were found to be suffering from various defects and ailments.

118. The number of schools to whom grant-in-aid was given increased from 156 to 163 and the amounts paid during the year aggregated Rs. 85,373 against Rs. 70,282 in the preceding year.

119. In response to the Corporation's appeal to Government for a substantial contribution towards the cost of the scheme adopted by the Corporation for the extension of primary education, Government were pleased to make the generous offer, which the Corporation accepted, that the Corporation should continue to bear the whole of the cost of primary education in the City up to the limit of Rs. 6,58,175-8-4 (the net budgetted expenditure for 1917-18) and that the excess over this expenditure should from the year 1918-19 be shared equally by Government and the Corporation. Government have also signified their intention to introduce legislation enabling the Corporation to introduce, when so disposed, free and compulsory primary education for boys or girls or for both.

Municipal Servants' Act.

120. In January 1919 the labour staff of the Love Grove Pumping and Compressor Stations came out on strike for an immediate advance of wages and on this occasion the Municipal Servants' Act had to be put into force. Six of the men were proceeded against and charged at the Mazagon Police Court. On the defendants' promising not to repeat the offence the case was withdrawn.

P. W. MONIE,
Municipal Commissioner
for the City of Bombay.

CHIEF ACCOUNTANT'S REPORT.

FOR 1918-19.

Contents.

	Pages
Opening Remarks	19 to 23
Income	23 to 25
Octroi Duties	26
Revenue Expenditure (including Lapsed Grants and Savings)	26 to 33
Surplus Cash Balance	33 and 34
Loans Raised	34 and 35
Debt and Sinking Funds	35 and 36
Loan Works Expenditure	36 to 38
Plague Expenditure	38
Liabilities and Assets	38 and 39
Investments and Invested Balances	39 and 40
Special Funds	40
Water Works Account	40
Assets and Liabilities	41
Suspense Accounts	41 to 44
Street Improvements	45
General Financial Position	45 and 46
Fire Brigade	46
Revenue Audit	47 to 50
Cost of Department	51
List of Appendices	52

FINANCIAL.

Report of Mr.D. Robertson, Acting Chief Accountant, for the financial year 1918-19 as forwarded with his No. A. E./C. 1765 of 27th August 1919.

I have the honour to submit my report on the accounts of the Municipality for the year 1918-19 :—

The documents necessary for the preparation of the report were required to be submitted on the 15th May 1919, but many of them were not sent till very much later and consequently the progress of the report was retarded.

2. During the year under report, the rates of taxation remained stationary.

3. In the following statement the income and expenditure for the year is compared with the original and Revised Estimates and the actuals for the preceding year :—

—	Budget Estimates for 1918-19.	Revised Estimates for 1918-19.	Actuals for 1918-19.	Actuals for 1917-18.	Increase or Decrease.		
					As compared with the Budget Estimates.	As compared with the Revised Estimates.	As compared with the previous year.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Income ...	1,52,37,850	1,70,51,850	1,73,74,185	1,48,29,387	+ 21,36,335	+ 3,22,335	+ 25,44,798
Expenditure..	1,52,80,907	1,76,53,096	1,70,26,649	1,42,61,391	+ 17,45,742	— 6,26,447	+ 27,65,258
Surplus ...	...	...	3,47,536	+5,67,996	...	....	...

4. The opening and closing working cash balances are as under :—

Opening Balance.	Surplus for the year.	Closing Balance.
Rs.	Rs.	Rs.
71,61,781	3,47,536	75,09,317

This closing balance comprises the following items :—

(1)	Surplus Revenue Fund (*vide* Appendix No. 3) ...		Rs. 46,22,444
(2)	Lapsed Grants for 1918-19 required to be renewed in 1919-20 (*vide* Appendix No. 2)		„ 13,67,073
(3)	Contribution on 1st May 1919 to the City Improvement Trust—		
	Budget Estimates, 1919-20 ...	Rs. 14,90,472	
	Additional Grant ... ... „	29,328	
			„ 15,19,800
		Total	Rs. 75,09,317

5. The opening and closing Reserve Stores Balances are compared below :—

—	1918-19.	1917-18.	Decrease.
	Rs.	Rs.	Rs.
Serviceable stores	6,84,389	6,95,219	— 10,830
Surplus and obsolete stores	2,572	3,085	— 513
Total Rs. ...	6,86,961	6,98,304	— 11,343

6. The subjoined statement contains the grants sanctioned for expenditure in 1918-19 outside the Budget Estimates and their comparison with the figures for the previous year :—

	1918-19.	1917-18.	Increase.
	Rs.	Rs.	Rs.
Additional grants	24,02,650	8,71,039	+ 15,31,611
Renewed grants	11,17,198	8,69,495	+ 2,47,703
Total ...	35,19,848	17,40,534	+ 17,79,314

The grants requiring renewal in 1919-20 as compared with those renewed in 1918-19 are shown below :—

1919-20.	1918-19.	Increase.
Rs.	Rs.	Rs.
13,67,073	11,17,198	2,49,875

Surplus Cash Balance.

7. The Surplus Cash Balance stood at Rs. 37,49,482 thus :—

Surplus Revenue Fund as per Appendix No. 3	Rs.	46,22,444
Deduct—		
(1) Minimum required by law	Rs. 1,00,000	
(2) Reserve stock not held in cash (Appendix No. 5)	„ 6,86,961	
(3) Plant and machinery	„ 86,001	8,72,962
Net Surplus Cash Balance at 31st March 1919	Rs.	37,49,482

Incidence of Taxation.

8. The incidence of taxation per head calculated on the basis of the Census for 1911 (9,79,445) during each of the five years ending with 31st March 1919 works out as follows :—

Year.	Amount. Rs. a. p.
1914-1915	10 14 8
1915-1916	12 9 8
1916-1917	12 11 11
1917-1918	13 9 4
1918-1919	15 14 2

I think, however, that the figure Rs. 15-14-2 for the year cannot be taken as a true indication of the incidence, in view of the increase in population which is roughly estimated to be between two and three lakhs. The rate of taxation should be considerably less.

9. The outstanding of rates and taxes at the close of the year 1918-1919 stood at Rs. 6 13,855 against Rs. 68,127 in the previous year, showing an increase of Rs. 5,45,728 as follows :—

Outstanding at	General Tax.	Water Tax.	Halalkhore Tax.	Wheel Tax.	Meter Tax.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
31st March 1918	27,233	29,004	7,789	3,957	144	68,127
Do. 1919	*5,23,385	48,328	31,529	10,494	119	6,13,855
	*4,96,152	19,324	23,740	6,537	25	5,45,728
	Increase	Increase	Increase	Increase	Decrease	Increase

* This includes Rs. 3,14,772 on account of arrears due by the Port Trust which was received on 1st April 1919.

10. The receipts for the year exceeded those of the previous year by Rs. 25,44,798, the principal variations being under the following heads :—

Comparison with Income for 1917-1918.

		Increase.	*Decrease.*
		Rs.	Rs.
(1)	General Tax	18,12,618	.....
(2)	Wheel Tax and Tolls	17,664	.....
(3)	Town Duties	...	85,722
(4)	Licenses	...	5,600
(5)	Tobacco Duties	14,718	.....
(6)	Halalkhore Tax	2,20,945	.....
(7)	Water Tax	2,79,882	.....
(8)	Market Receipts	49,702	.....
(9)	Miscellaneous Fines and Penalties	9,987	.....
(10)	„ Receipts	1,51,338	.....
(11)	„ Fees	...	18,072
(12)	Net Profit on Municipal Workshops	18,313	.....
(13)	Sale Proceeds of unserviceable tools and plant.	6,295	.....
(14)	Interest and Profit on the Investments of Surplus Loan and other Balances	64,346	.....
		Rs. 26,45,808	1,09,394

Comparison with (*b*) Expenditure for 1917-1918.

11. The expenditure for the year was much in excess of the preceding year, the increase being Rs. 27,65,257. The following are some of the principal items which contributed to the increase :—

		Rs.
(1)	General Superintendence	26,628
(2)	Fire Brigade	35,732
(3)	Public Gardens	11,530
(4)	Public Works	7,19,574
(5)	Public Health Department	3,89,353
(6)	Markets and Slaughter Houses	1,35,803
(7)	Primary Education	2,35,708
(8)	Hospitals	42,758
(9)	Miscellaneous (including Grain Compensation and War Allowance)	3,59,529
(10)	Contribution to the C. I. Trust	54,574
(11)	Debt	2,44,195
(12)	Depreciation on Government Paper held in Surplus Funds	6,34,256

Against these increases, there were decreases under the following heads :—

		Rs.
(1)	Secondary Education	40,095
(2)	Pensions and Gratuities	11,005
(3)	Miscellaneous—Local Allowance	9,315
(4)	Contribution towards the building to be erected at Apollo Bunder to commemorate the visit of His Majesty the King-Emperor of India	25,000
(5)	Investment of sale proceeds of Municipal land in the Municipal Land and Building Fund	34,079
(6)	Portion of the difference between the book value and sale proceeds of unserviceable parts of meters written of	2,544
(7)	Increased rates paid to contractors in respect of certain articles.	4,154

12. The Loan liabilities at the beginning and at the end of the year were as under :—

Outstanding debt at 1st April 1918. Rs.	Loan raised during the year.	Repayment during the year. Rs.	Balance of outstanding debt at 31st March 1919. Rs.
7,41,43,634	30,00,000	2,36,995	7,69,06,639

The state of the Sinking Fund is shown below :—

Amount of Fund at 1st April 1918. Rs.	Interest realizations. Rs.	Sinking Fund Instalments. Rs.	Amount of Fund at 31st March 1919. Rs.
1,97,26,287	7,57,999	9,35,688	2,14,19,974

Allowing for the Sinking Fund of Rs. 2, 14,19,974 against the outstanding debt of Rs. 7,69,06,639, the net liability is reduced to Rs. 5,54,86,665.

Borrowing Powers.

13. The rateable valuation of properties in the City at the end of the year stood at Rs. 7,46,87,830 and the loan liability at Rs. 7,69,06,639 so that the margin up to which further borrowing is permissible under Section 109 (*b*) of the Municipal Act is Rs. 7,24,69,021 and always provided that the revenue required for the service of fresh loans will be forthcoming. From the following statement it will be seen that the ratio of rateable value of properties to debt during the year under report works out to 1:1·029 indicating that the reserve of borrowing power left to the Corporation is still considerable and that again during the year under review the wealth liable to taxation has grown faster than the indebtedness of the Corporation.

Year.	Rateable value of properties.	Municipal debt.	The ratio of the rateable value of properties in the City as it stood on the 31st March of each year to the aggregate amount of debt at the same time.
	Rs.	Rs.	
1903-04	3,10,16,244	4,74,20,356	1:1·529
1904-05	3,18,86,460	4,86,12,762	1:1·524
1905-06	3,43,83,811	4,97,15,015	1:1·445
1906-07	3,73,16,953	4,96,06,066	1:1·329
1907-08	3,98,64,747	5,07,82,403	1:1 273
1908-09	4,22,01,034	5,20,22,939	1:1·232
1909-10	4,45,13,209	5,49,08,205	1:1·233
1910-11	4,68,59,058	5,62,88,147	1:1·201
1911-12	4,82,55,536	5,91,60,747	1:1·225
1912-13	4,96,64,843	5,90,41,916	1:1·189
1913-14	5,21,62,819	6,48,83,677	1:1·244
1914-15	5,38,67,232	6,88,44,972	1:1·278
1915-16	5,70,83,834	7,44,00,775	1:1·303
1916-17	5,88,81,972	7,42,36,994	1:1·260
1917-18	6,12,34,537	7,41,43,634	1:1·211
1918-19	7,46,87,830	7,69,06,639	1:1·029

Loan Works.

14. The following statement contrasts the expenditure on Loan Works in 1917-18 and 1918-19 with the Original and Revised Estimates for those years :—

	From Loan Funds.			Advances from Surplus Cash Balance.		
	Budget Estimates.	Revised Estimates.	Actuals.	Budget Estimates.	Revised Estimates.	Actuals.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1917-18 ...	23,64,995	22,03,470	12,51,212	1,48,757	9,35,000	3,34,586
1918-19 ...	23,63,100	32,40,257	22,10,033	9,70,900	1,66,300	*Cr.* 3,48,953
Increase on the actuals for 1917-18 ...			9,58,821	Decrease on the actuals for 1917-18.		6,83,539

Plague Expenditure.

15. The expenditure on Plague operations as compared with the original and final grants and the actuals for the previous year is shown below :—

Actuals for 1917-18.	Budget grants for 1918-19.	Final amended grant for 1918-19.	Expenditure for 1918 19.	Balance unexpended.	Required to be renewed in 1919-20.	Net savings.
Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.
1,32,160	1,23,000	1,43,154	1,26,506	16,648	4,666	11,982

INCOME.

Actuals Compared with the original Budget Estimates.

16. A detailed comparison between the Budget Estimates and the Actuals will be found in Appendix No. 1.

The following were the main factors contributing to the excess of Rs. 21,36,335 :—

Budget Head.	Amount of Increase.	Reasons.
	Rs.	
1. General Tax	12,60,162	Due to arrears of Rs. 9,9?,128 on account of General Tax from 1914-15 to 1917-18 recovered from the Port Trust owing to revision of assessment for the quinquennial period ending 31st March 1919 and also to the erection of new buildings in the City.
2. Wheel Tax	24,640	Due to the increase of Motor Cars.
3. Town Duties	79,583	Due to heavier imports principally of grain, sugar and fire wood.
4. Licenses	14,340	Due to increase in the issue of Music and Land Conveyance licenses, as also to certain new trades and commodities brought under Municipal control during the year.
5. Tobacco Duty	28,759	Due to heavier imports.
6 Halalkhore Tax	1,74,067	Due to the erection of new buildings.
7. Water Tax	2,02,602	Due to the erection of new buildings and to increase in water consumed by the Port Trust, Railways, Mills, &c., and in compounded charges.
8. Market receipts	55,451	Due to enhancement in slaughter fees and to increase in the fees received for the different market rights.
9. Miscellaneous receipts ...	1,43,115	Due to (1) increase in the number of plots let on hire, (2) increase in the fees for different rights, and (3) sale proceeds of land and structure at Kurla.
10. Net profit on Municipal Workshops.	22,546	Due to increase in the number of jobs executed in the shops.
11. Interest and profit on the investment of Surplus loan and other balances.	1,34,518	Due to interest realized on the investment of the balances of the loan of Rs. 30 lakhs raised during the year for which no provision was made in the estimates.

There were also the following minor increases :— Rs.

1. Public Gardens 1,406
2. Miscellaneous Fines 8,558
3. Do. unclaimed dues 3,084
4. Sale proceeds of unserviceable tools and plant ... 8,797

There were decreases under the following heads :—

		Rs.
1.	Miscellaneous Fees	13,870
2.	Contribution from Municipal servants towards Pension, &c., Fund	1,718
3.	Net profit on sale of stores to Contractors	8,961

Comparison between Revised Estimates and Actuals.

17. As compared with the Revised Estimates the actuals resulted in an increase of Rs. 3,22,335, the most important variations being—

		Increases. Rs.	Decreases. Rs.
1.	General Tax	36,162	...
2.	Wheel Tax	...	24,860
3.	Town Duties	29,583	...
4.	Tobacco Duty	14,759	...
5.	Halalkhore Tax	11,067	...
6.	Water Tax	72,602	...
7.	Miscellaneous Receipts	1,05,115	...
8	Net profit on Municipal Workshops...	22,546	...
9.	Net profit on sale of stores to contractors	...	8,961
10.	Interest and profit on the investment of Surplus Loan and other balances	57,018	...

The variations were due to the same causes as those mentioned in comparing the actuals with the original estimates.

Comparison between the Actuals for 1917-18 and 1918-19.

18. The income for the year under report exceeded that of the previous year by Rs. 25,44,798. The principal increases were under the following heads :—

		Rs.	
(1)	General Tax	18,12,618	Due to increase in the number of new buildings in the rateable value consequent on rise in rents and on account of arrears received from the Port Trust from 1914-15 to 1917-18 on the quin-quennial revision of assessment of their properties (Rs. 9,93,128-0-0).
(2)	Wheel Tax	17,664	Due to increase in the number of motor cars.
(3)	Tobacco Duty	14,718	Due to heavier imports.
(4)	Halalkhore Tax	2,20,945	Due to increase in the number of buildings and rateable value
(5)	Water Tax	2,79,882	Due to increased consumption of water in the suburbs as also by Railways, Port Trust, Military Camps, Mills and factories.
(6)	Market Receipts	49,702	Due to increase in stall rents, squatters' fees, fair ground and feeding fees and slaughter fees.
(7)	Miscellaneous Fines	9,987	Due to increase in the fines levied by Magistrates.
(8)	Miscellaneous Receipts	1,51,838	Due to increase in ground rent and receipts from sale of rights which were hitherto shown under the head "Miscellaneous Fees".
(9)	Profit on Municipal Workshops.	18,313	Due to increase in the number of jobs executed in the shops.
(10)	Sale proceeds of Unserviceable Tools and Plant.	6,295	Due to a larger quantity of scrap being available for sale this year and to higher rates being obtained.
(11)	Interest and profit on investment of Surplus Loan and other balances	64,346	Due to balances available for investment being heavier consequent on the raising of the loan of Rs. 30 lakhs during the year."

The principal decreases are shown below :—

(1)	Town Duties	85,722	Due to the falling-off in receipts from wines and spirits, sugar, ghee and timber.
(2)	Licenses	5,600	Consequent on less receipts from Land Conveyance and Music licenses.
(3)	Miscellaneous Fees	18,072	Consequent on the transfer of receipts from the sale of the right of skinning dead animals which were hitherto shown under this head, to the head, "Miscellaneous Receipts."

19. The position as regards our principal sources of income, *viz.*, General Tax, Water Tax and Halalkhore Tax is very satisfactory as will be seen from the subjoined statement, The net increase works out to Rs. 13,29,000. In addition, I consider, the following might be looked upon as permanent additions to our income :—

1.	Wheel Tax and Tolls	Rs. 17,000
2.	Tobacco Duty	„ 14,000
3.	Market Receipts	„ 40,000
4.	Miscellaneous Receipts	„ 50,000

The permanent expansion of our revenue during the year may thus be put at Rs. 14,50,000.

1917-1918.	Amount.	Total.	Grand Total.	1918-1919.	Amount.	Total.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p	Rs. a. p.
1. General Tax (including Fire Tax) at 9¼ per cent.—				1. General Tax (including Fire Tax) at 9¼ per cent.—			
Total collections booked	56,91,393 8 3			Total collections booked	75,04,011 10 11		
Less—				*Less*—			
Arrear recoveries	13,601 0 8			Arrear recoveries...	10,04,854 2 7		
	56,77,792 7 7				64,99,157 8 4		
Add—				*Add*—			
Outstandings for the year at the close of the year	20,606 14 0	56,98,399 5 7		Outstandings for the year at the close of the year	5,22,261 9 11	70,21,419 2 3	
2. Water Tax and Miscellaneous Water Works Revenue at 3 per cent. on rateable value—				2. Water Tax and Miscellaneous Water Works Revenue at 3 per cent. on rateable value—			
Total collections booked	26,97,720 0 1			Total collections booked	29,77,602 5 5		
Less—				*Less*—			
Recoveries for previous years	8,290 4 6			Recoveries for previous years	4,425 6 0		
	26,89,429 11 7				29,73,176 15 5		
Add—				*Add*—			
Outstandings for the year at the close of the year	27,626 11 9	27,17,056 7 4		Outstandings for the year at the close of the year	47,760 10 0	30,20,937 9 5	
3. Halalkhore Tax at 3 per cent.—				3. Halalkhore Tax at 3 per cent.—			
Total collections booked	16,13,122 14 5			Total collections booked	18,34,067 8 5		
Less—				*Less*—			
Arrear recoveries	7,598 2 3			Arrear recoveries...	4,541 15 1		
	16,05,524 12 2				18,29,525 9 4		
Add—				*Add*—			
Outstandings for the year at the close of the year	6,092 11 9	16,11,617 7 11	1,00,27,073 4 10	Outstandings for the year at the close of the year	31,403 1 3	18,60,928 10 7	1,19,03,285 6 3

Net Income from Property Taxes for 1918-1919	...Rs. 1,19,03,285 6 3
Deduct—Net Income from Property Taxes for 1917-18	... „ 1,00,27,073 4 10
	Rs. 18,76,212 1 5
Less—Increase in Outstanding Balances	... „ 5,47,098 15 8
Net Increase in 1918-19 over 1917-18	... Rs. 13,29,113 1 9

OCTROI DUTIES.

20. As usual the various articles on which duty was levied at the time of import under the provisions of Section 192 (1) of the Municipal Act, the amount levied and refunds allowed thereon under Section 192 (2) on their export, are shown in Appendix No. 15.

The gross collections for the year were estimated at Rs. 43,50,000, the refunds at Rs. 24,25,000 and the net revenue at Rs. 19,25,000. The actual gross realizations made by the Port Trust and the two Railways were Rs. 40,90,800 and the refunds paid aggregated Rs. 22,57,724.

The net revenue collected and paid into the Municipal Treasury in the year amounted to Rs. 19,54,583, showing a decrease of Rs. 85,722, as compared with the actuals of the previous year, *viz.*, Rs. 20,40,305. The net realizations after deducting the cost of collection, amounted to Rs. 17,11,503 against Rs. 18,01,132 in the previous year.

21. Appendix No. 16 shows the net revenue derived from each dutiable article during the ten years ending 1918-19, Appendix No. 17 the actual collections, the refunds admitted, and the net revenue during the five years ending 1918-19 and Appendix No. 18 the gross collections for the year from each dutiable article month by month from each source with the total refunds admitted as compared with the figures of the preceding year.

REVENUE EXPENDITURE.

22. The final sanctioned grants amounted in the aggregate to Rs. 1,87,67,255 as follows:—

	Rs.
Budget grants	1,52,80,917
Lapsed grants	11,17,198
Additional grants	24,02,650
Total ...	1,88,00,755
Savings as per Revised Estimates	33,500
Final sanctioned grants	1,87,67,255

23. The principal items for Rs. 10,000 and above making up the additional grants of Rs. 24,02,650 are as under:—

		Rs.	a.	p.
(1)	To meet depreciation in the value of 3½ per cent. Government Paper held in Surplus Funds.	6,52,669	14	0
(2)	To meet excess in the grant for road repairs for the year 1917-18.	43,400	0	0
(3)	To supplement the Budget provision for Pensions, Gratuities, &c., for the year 1917-1918	10,000	0	0
(4)	To meet the cost of maintaining the Maternity Home at Parel taken over by the Municipality	11,000	0	0
(5)	To supplement the Budget grant under the sub-heads:— XII—Markets and Slaughter Houses— C.—Slaughter Houses, 2—Feed of Cattle brought for slaughter ... Rs. 67,500 F.—Meat Carriage, B—Bullock Traction, 4—Running Expenses— (*a*) Feed ... ... „ 15,700 (*c*) Hire of Carts ... ... „ 10,600	93,800	0	0
(6)	To supplement the Budget provision for the supply of diets to Hospitals ...	10,000	0	0
(7)	To supplement the Budget grant under the following sub-heads:— II—Conservancy Branch— E—Disposal of Town Refuse, 2—Bullock Traction, IV—Running Expenses, Feed of bullocks ... Rs. 85,000 III—Halalkhore Branch— C—Bullock Traction, 2—Feed of bullocks ... ... „ 10,000 V—Cemeteries—3 Contingencies, Feed of horses ... ... „ 500 XII—Infectious Diseases, X—Feed of horses ... ... „ 500	96,000	0	0
(8)	To meet the payment of temporary War allowance of Rs. 2 to persons drawing wages not exceeding Rs. 30 per mensem	1,35,534	0	0
(9)	To supplement the Budget grant under XII—Infectious Diseases, B—Epidemics	50,000	0	0
(10)	To supplement the Budget grant under Public Works (Engineer's Department) VIII—Miscellaneous Drainage and Sluice. A.—Miscellaneous Drainage, (III) Hire of Carts, drivers and cattle	20,000	0	0
(11)	For adding to the Street Improvement grant for 1918-19, the amount of moneys received on account of sale of set-forward lands and indemnity moneys recovered from house-owners for permission to build within the regular lines of streets during the year 1917 18 ... ...Rs. 43,221 13 1 For transfer to Municipal Land and Building Fund of the amount of moneys received on account of sale of land other than set-forward land during the year 1917-18. „ 7,319 10 7	50,541	7	8
	Carried over Rs. ...	11,72,945	5	8

		Rs.	a.	p.
	Brought over ...	11,72,945	5	8
(12)	For organizing and equipping the Tuberculosis Sanitorium and Hospital to be established by the King George V Anti-Tuberculosis League	25,000	0	0
(13)	To supplement the yearly grant of Rs. 10,000 made to the Anti-Tuberculosis League for the maintenance of an Hospital	10,000	0	0
(14)	To meet the cost of cleaning t e low level channel No. 1 from the junction of Haines Road and Junction Road to Fergusson Road and the whole of the channel No. II	30,000	0	0
(15)	To meet excesses over Budget Grants for 1917-18	1,44,159	3	2
(16)	To meet the cost of replacing the existing latrines, urinals and washing places, in front of the Custom House	16,306	0	0
(17)	To meet the payment of additional War Allowance to the clerical staff ...	1,05,870	0	0
(18)	To supplement the Budget provision under VI—Mechanical Branch, A—Pumping and Air Compressor Station &c., (B) Pumping Station Love Grove, 5—Stores	14,000	0	0
(19)	To meet the cost of improving certain lanes in Mahim...	14,898	0	0
(20)	To meet the cost of purchasing 60 pairs of bullocks required for the Road Department	12,000	0	0
(21)	To supplement the Budget Grants for Road Watering and Road Repairs ...	2,31,000	0	0
(22)	To supplement the Budget Grants under XII—Infectious Diseases, B—Epidemics	10,000	0	0
(23)	To supplement the Budget Grant under the Public Health Department B—Conservancy, (E) Disposal of Town Refuse, 7—Motor Traction (IV) Running expenses	23,000	0	0
(24)	To meet excess over the Budget Grants for commission, &c., charges payable to the G. I. P. Railway and B. B. & C. I. Railway for the collection of Town Duties	45,000	0	0
(25)	To supplement the Budget Grants under XI—Public Health, O—Plague (A) General Supervision— I—Supervision ... ... Rs. 4,000 (F) Rat Destruction, 2—Rewards to rat catchers ... ... „ 8,000	12,000	0	0
(26)	To meet the amount of special War Bonus of Rs. 1-8-0 to each of the employes on the permanent Schedule drawing pay upto Rs. 30 per mensem.	35,000	0	0
(27)	To supplement the Budget Grant under XII—Infectious Diseases, B—Epidemics	50,000	0	0
(28)	To supplement the Budget Grant under XI—Public Health Department, B—Conservancy, (E) Disposal of Town Refuse, 1—Motor Traction, 5—Repairs and Maintenance	20,000	0	0
(29)	To meet the cost of laying 9' pipe sewer in Vanzawady at Mahim, Mahomedan Street and Ghelabhai Street	12,949	0	0
(30)	To meet the payment of additional rebate to Bombay Port Trust from 1st April 1914 to 1st April 1919	2,36,450	0	0
	Total ... Rs.	22,20,072	8	10

24. The transfers made from one Budget head to another without in any way affecting the total Budget provision for the year amounted to Rs. 3,29,317.

25. The total expenditure actually incurred against the aggregate final sanctioned grant, the amount of unexpended balance renewed and the net savings are shown below :—

Final sanctioned grant.	Expenditure.	Balance.	Amount to be renewed.	Net saving.	Percentage of savings on the final sanctioned grant *minus* renewals.	Similar percentage of savings in 1917-18.
Rs.	Rs.	Rs.	Rs.	Rs.		
1,87,67,255	1,70,26,649	17,40,606	13,67,073	3,73,533	2·15	1·99

26. The following figures show the percentage of savings to sanctioned grants for the last 5 years making no allowance for renewals :—

Year.	Final sanctioned grants after deducting savings taken credit for in the Revised Estimates.	Unappropriated net savings.	Percentage.
	Rs.	Rs.	
1914-15	1,36,60,686	1,42,185	1·04
1915-16	1,41,19,265	3,16,634	2·24
1916-17	1,52,86,047	2,02,260	1·32
1917-18	1,56,67,864	2,89,275	1·85
1918-19	1,87,67,255	3,73,533	1·99

27. The following table shows the results in regard to total savings for each year from 1914-15 to 1918-19 :—

——	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	Rs.	Rs.	Rs.	Rs.	Rs.
Savings as estimated in the Revised Estimates	4,33,500	85,600	2,41,244	65,000	33,500
Further savings accrued in final accounts	1,42,185	3,16,634	2,02,260	2,89,275	3,73,533
Total Rs. ...	5,75,685	4,02,234	4,43,504	3,54,275	4,07,033

28. In the following statement, the gross grants sanctioned from 1914-15 are compared with the lapses year by year :—

——	Gross grants sanctioned.	Savings on Revised Estimates.	Expenditure booked against gross grants.	Lapses on final grants sanctioned.
	Rs.	Rs.	Rs.	Rs.
1914-15 ...	1,40,94,185	4,33,500	1,24,53,191	16,40,994
1915-16 ...	1,42,04,865	85,600	1,28,03,870	14,00,995
1916-17 ...	1,55,27,291	2,41,244	1,42,14,292	13,12,999
1917-18 ...	1,57,32,864	65,000	1,42,61,391	14,06,473
1918-19 ...	1,88,00,755	33,500	1,70,26,649	17,40,606

The total lapsed grants required to be renewed in 1919-20 aggregate Rs. 13,67,073 against Rs. 11,17,198 in 1918-19.

29. The heads under which the renewals are required will be found in Appendix No. 2.

The more important renewals and the percentage of renewed grants to grants allotted are shown in the following table :—

Percentage of renewals to total sanctioned grants.	Departments and Service heads.	Total Renewals.
		Rs.
9·24	General Superintendence	39,523
3·06	Assessment and Collection Department	17,700
10·76	Fire Brigade	31,340
30·28	Public Gardens	43,826
12·31	Public Works	5,82,180
7·60	Public Health	2,41,972
16·35	Markets and Slaughter Houses	78,701
4·63	Pensions and Gratuities	8,015
5·72	Miscellaneous—War Allowance	26,000
6·04	Debt	2,84,749

30. In the Revised Estimates the figure of lapsed grants was put at Rs. 10,35,000. The higher figure of Rs. 13,67,073 is principally accounted for under New Works grants and the various repairs grants.

Comparison between the actual expenditure during 1917-18 *and* 1918-19.

31. The Revenue Expenditure of the year under report as compared with the preceding year shows increases aggregating Rs. 30,22,073 under various heads and decreases aggregating Rs. 2,56,816 under other heads, leaving the unprecedented net increase of Rs. 27,65,257

82. The increases and decreases are dealt with in the following paragraphs. :—

A.—*General Superintendence.*—The net increase of Rs. 26,628 is due (1) to expenditure incurred on the printing of Voters' lists and to the general election and (2) on account of transfer of the Revenue Audit.

B.—*Assessment and Collection Department.*—The increase of Rs. 14,256 was due (1) to maximum salaries having been allowed to be drawn by certain members of the staff under the Revised Schedule ; (2) to the acting arrangements made in place of the Assessor and Collector ; and (3) to the mounting of new survey sheets and the purchase of house-numbering plates. This increase was more than counterbalanced by decrease on account of transfer of the Revenue Audit to this Department.

C.—*Fire Brigade.*—The increase of Rs. 35,732 is due to payment made for hose purchased in the previous year and on account of higher rates paid for stores and clothing.

D.—*Public Gardens.*—The increase of Rs. 11,530 is due (1) to revision of the scale of pay of the establishment and labour staff and to higher rates for feed of animals, and (2) to a greater expenditure on New Works.

E.—*Public Works (Engineer's) Department.*—The increase of Rs. 1,05,340 under VI.—Mechanical Branch, A.—Pumping and Compressor Stations—Flood Gates—is due (1) to higher prices having had to be paid for labour, coal and other materials ; (2) to heavy repairs to machinery ; (3) to increased consumption of stores ; (4) to payment of bills on account of repairs to buildings executed in the previous year ; (5) to the renewal of the sealed sewage main in Fergu-son Road on an extensive scale.

Under VIII—Miscellaneous—Drainage and Sluices—The increase of Rs. 37,301 is due (1) to special provision for cleaning storm-water courses ; (2) to higher rates paid for labour carts ; (3) to heavier expenditure on repairs to drains ; and (4) on account of special repairs to the bank and sides of Low Level Channel No. 1. The increase of Rs. 30,922 is on account of more expenditure incurred on New Works.

Under IX—Streets and Buildings—The net increase amounts to Rs. 6,04,550 as under :—

	Increase.	Decrease.	Remarks.
	Rs.	Rs.	
A.—Inspection and Supervision ...	26,628	.....	Increased cost on account of employment of trained sub-overseers and of the staff under them for better efficiency of the Department, higher rates paid for clothing and printing and the expenses incurred on the mounting of new survey sheets.
B.—Public Lighting	.....	2,582	Owing to less number of lamps erected in consequence of the difficulty of obtaining materials from Home.
C.—Road Watering	22,577	.....	Due to higher rates paid for labour and bullock carts.
D.—Roads and Footpaths	3,25,370	.....	Due (1) to more extensive operations in oiling and tarring roads, (2) to higher cost of materials, and (3) to cost of improving the foundations of roads and paving a larger number of footpaths.
E.—Street Improvement	.....	13,048	Due to less number of claims received during the year.
F.—Cleaning, lighting and repairing Port Trust Wharves.	2,34,816	.....	Due to the payment of additional rebate to the Bombay Port Trust for five years ending 31st March 1919 owing to the enhanced cost of road materials and labour.
Under New Works (Streets and Buildings).	11,888	.....	Due to execution of more works than in the preceding year.

F.—Under X.—Water Works—there was a decrease of Rs. 33,229 due (1) to less expenditure incurred on the replacement of the existing teakwood roof over the Malabar Hill Reservoir by cement concrete roof, and (2) to a smaller expenditure on New Works.

G.—*Public Health.*—There were increases aggregating Rs. 4,18,196 and decreases amounting to Rs. 28,843 under this head, the net increase being Rs. 3,89,353.

The reasons for variations are given below :—

B. Conservancy Branch.—There was a net increase of Rs. 2,06,496 made up as under :—

	Increase.	Decrease.	Remarks.
	Rs.	Rs.	
(*a*) Superintendence and Inspection	7,472	.....	Due to the temporary staff of caretakers being made permanent and to the full strength being maintained throughout the year.
(*b*) Veterinary Establishment—			
2. Stores, clothing and Miscellaneous	2,400	.....	Owing to the transfer of charges hitherto shown under "Street Cleansing and Sanitation."
3. Medicines and Medical appliances	675	.....	
4. Tools and Plant	1,150	.....	
(*c*) Street cleansing and sanitation.			
1 Labour	.....	91,581	Now shown under the account head "Bullock Traction" in which there is a corresponding increase.
2. Stores	.....	9,201	Due to the allocation of the grant under different heads.
3. Disinfectants	4,468	.....	Due to higher rates.
4. Tools and Plant	2,904	.....	do.
(*d*) Gully flushing—			
1. Establishment	.....	2,820	Due to reduction in labour employed.
2. Repairs and maintenance.	1,988	.....	Due to extensive repairs.
3. Running expense—			
(*b*) Stores, coal, &c.	1,579	.....	Due to higher prices of coal.
4. Maintenance of hydrants.	3,385	.....	Due to extensive repairs to engines and hydrants.
(*e*) Disposal of Town Refuse—			
I. Motor Traction—			
1. Establishment	4,045	.....	Due to revision of the schedule and the payment of bhatta allowance to biggaries.
2. Clothing and Miscellaneous	1,300	.....	Due to the transfer of charges hitherto shown under "Street Cleansing and Sanitation."
4. Running expenses ...	24,965	.....	Due to higher rates paid to petrol and motor accessories.
5. Repairs and Maintenance	45,122	.....	Due to charges incurred in 1917-18 having been paid this year.
II. Bullock traction—			
1. Labour	90,968	.....	Owing to the transfer of charges hitherto shown under "Street Cleansing and Sanitation"
3. Purchase of live stock...	.....	26,269	Due to the supply of bullocks not having been completed during the year.
4. Running expenses—			
A. Feed of bullocks ...	86,120	.....	Due to higher rates for feed.
B. Extra rations ...	1,260	.....	Owing to transfer of charges hitherto shown under "Street Cleansing and Sanitation."
C. Stores and Contingencies.	13,838	.....	
7. Repairs and Maintenance—			
A. Carts	42,616	.....	Due to larger number of carts repaired and to rise in the prices of materials and wood.

	Increase.	Decrease.	Remarks.
IV. Loading Siding.	Rs.	Rs.	
(A) Mahaluxmi—			
(5) Maintenance and repairs.	5,189	.....	Due to extensive repairs and to higher prices.
(B) Colaba—			
(4) Rent—			
A. Ground Rent	.....	4,905	Due to cessation of rent payable to Government in consequence of exchange of land at Gun Carriage Factory at Colaba.
(6) Haulage charges to Tardeo Fla's.	.....	1,437	Due to non-presentation of the claims during the year.
(*f*) Miscellaneous repairs and Maintenance of buildings.	2,369	.....	Due to extensive repairs.

C. Halalkhore Branch.—There was a net increase of Rs. 35,221 made up of the following items :—

	Increase.	Decrease.	Remarks.
	Rs.	Rs.	
A. Superintendence and Inspection—			
1. Establishment	9,158	.....	Due to the revision of the schedule.
B. Cleansing and Sanitation—			
1. Labour	.....	19,679	On account of sub-division of account heads.
C. Bullock traction—			
1. Labour	18,658	.....	Owing to the transfer of charges hitherto shown under cleansing and sanitation.
3. Purchase of Live Stock ...	7,960	.....	Payment had to be made this year on account of liabilities incurred in the preceding year.
4. Running Expenses—			
A. Feed of bullocks	17,344	.....	Due to higher rates.
C. Stores and Contingencies	4,423	.....	Owing to transfer of charges hitherto shown under "Street Cleansing and Sanitation."
6. Repairs and Maintenance.—			
A. Carts	4,869	.....	Owing to increased number of carts repaired and rise in the prices of materials and wood.
D. Miscellaneous—			
A. Latrines and urinals—			
I. Improvements	.....	12,596	Due to bills not having been received and to the works not having been taken in hand during the same year.
B. Buildings and Structures—			
1. Repairs and Maintenance.	2,233	.....	Due to more extensive repairs.
D. Water supply	1,573	.....	Increased consumption of water.

D. *Registration of Births and Deaths.*—The increase of Rs. 13,023 under this head was principally due (1) to acting arrangements of the staff and (2) to the taking over of the Parel Maternity Home and increased charges in connection with these Homes.

E. *Cemeteries.*—The increase of Rs. 3,627 was due to high mortality from "Cholera" and "Influenza."

F. *Laboratory.*—The increase of Rs. 1,561 was due to acting arrangements made during the absence of the Municipal Analyst and other members of the staff.

G. *Dhobiwada.*—The decrease of Rs. 3,609 is due (1) to less consumption of water and (2) to no expenditure on special repairs being incurred this year and (3) to the bills on account of ground rent remaining unpaid.

H. *Milch Cattle Stables.*—The decrease of Rs. 5,545 was due to the closing of the Agripada Stable.

L. *Infectious Diseases.*—The increase of Rs. 1,33,497 was due to heavy expenditure incurred in connection with the Cholera and Influenza Epidemics.

N. *Malaria*—The decrease of Rs. 13,875 was due to reduction of the staff in consequence of its amalgamation with the Health Department.

O. *Plague.*—There was a reduction in expenditure to the extent of Rs. 5,654 owing to larger receipts from Government for treatment of military patients in the Maratha and Arthur Road Hospitals.

New Works.—(Health Department) There was an increase of Rs. 20,320.

Markets and Slaughter Houses.—There was an increase of Rs. 1,26,141 due (1) to increase in the prices of grain and fodder (2) to higher rates of materials and (3) to construction of 4 new meat vans.

New Works (Markets & Slaughter Houses).—There was an increase of Rs. 9,663 which calls for no remarks.

Education—4. *Primary.*—There was an increase of Rs. 2,35,708 owing to enhanced contribution to the Schools Committee.

B. Secondary.—There was a decrease of Rs. 40,095 on account of sub-division of the account head.

Hospitals.—There was an increase of Rs. 42,758 due to increased contribution to the Acworth Leper Asylum and to the Anti-Tuberculosis League.

Pensions and Gratuities.—There was a decrease of Rs. 11,005 owing to deaths among the pensioners and to fewer disbursements on account of Compassionate Allowance than in the preceding year.

Extraordinary Allowances (1) War Allowance.—The increase of Rs. 3,54,658 was due to the payment of additional war allowance to the employes.

(2) *Grain Compensation.*—The increase of Rs. 4,871 was due to the number of employes in receipt of this allowance being larger than in the preceding year.

(5) *Local Allowance.*—The decrease of Rs. 9,315 was due to revision of the schedule, the allowance having been amalgamated with the salaries.

Contribution to the City Improvement Trust.—There was an increase of Rs. 54,574 due to enhanced contribution paid to the Trust owing to an increase in the General Tax realizations.

Contribution towards the building to be erected at Apollo Bunder to commemorate the visit of His Majesty the King-Emperor to India. The decrease of Rs. 25,000 is due to the payment of two instalments of Rs. 25,000 each, *viz.*, one for 1916-17 and another for 1917-18 in the preceding year.

Municipal Debt.—The increase of Rs. 2,44,195 represents the payment of arrears of interest and repayment of debentures of the Drainage Loan of 1878 remaining unsurrendered in previous years.

Depreciation on Government Paper held in Surplus Funds.—The amount of Rs. 6,34,256 represents the write off of the difference between the book value and the market value of 3½ per cent. Government Paper belonging to the Fund.

Investment of Sale proceeds of Municipal Land in the Land and Building Fund.—There was a decrease of Rs. 34,079 on account of fewer sales of land effected during the year.

Increased rates paid to contractors in respect of certain articles.—The decrease of Rs. 4,154 is due to the special payment made last year to the stores contractors.

33. Reviewing the extent to which there have been permanent additions to our revenue expenditure during the year, I consider that the various additions to our recurring outlay may be placed at a total figure of Rs. 13,16,000 as follows :—

	Rs. Increase.
Public Gardens	7,000
Public Works Engineer's Department—	
(1) Mechanical Branch (Pumping Stations). Rs. 35,000	
(2) Miscellaneous Drainage and Sluices ... „ 25,0 0	
(3) Streets and Buildings ... ... „ 4,00,000	
	4,60,000
Public Health	1,83,000
Market and Slaughter Houses	52,000
Education	1,95,000
Hospitals	15.000
War Allowance	3,50,000
Contribution to the City Improvement Trust	54,000
Total ...Rs.	13,16,000

As regards the figure of Rs. 3,50,000 on account of War Allowance included in the above total, it may be assumed that the outlay will not recur, but having regard to the fact that the prices of foodstuffs and other necessaries of life are not likely to go down for some time to come yet, we shall probably be faced with the question of providing for increased rates of pay to the employes.

Comparing the figure of Rs. 13,16,000 given above with that given in para. (19) in which the expansion in our permanent income is brought out at Rs. 14,50,000, we have a balance of Rs. 1,34,000 in favour of income.

On our present rates of taxation, it cannot be expected that this balance in favour of income will continue.

We have to face the rise in the unit of cost under services, and increased outlay on Roads and on Primary Education. We are committed to the raising of large loans in the near future for Drainage, Water Supply, Traffic Communications, Housing and other services.

It will, I think, be agreed that the present time is opportune for considering in what direction the present bases of taxation should be modified and extended.

SURPLUS CASH BALANCE.

34. It will be seen from para. 4 that the closing working cash balance stood at Rs. 75,09,317. Excluding from this amount, the minimum balance of Rs. 1,00,000 required by law, Rs. 15,19,799-13-4 earmarked for payment to the City Improvement Trust in 1919-20, Rs. 13,67,073 reserved for renewals during 1919-20, Rs. 6,86,961-3-4 being the amount of stores in hand, and Rs. 86,001 the amount advanced for the purchase of plant and machinery, the unhypothecated Surplus Cash Balance works out at Rs. 37,49,482-8-4 against Rs. 40,26,591-3-4 at the close of 1917-18 showing a decrease of Rs. 2,77,108-11-0 as under :—

	Rs. a. p.	Rs. a. p.
Increase in lapsed grants	2,49,874 9 10	
Increase in contribution reserved for payment to the City Improvement Trust	3,67,112 10 11	
Increase in plant and machinery ...	19,000 0 0	
Rs. ...	6,35,987 4 9	
Decrease in balance of Reserve Stock..	11,342 9 3	
	Rs.	6,24,644 11 6
Excess of Income over Expenditure		3,47,536 0 6
	Net Decrease Rs.	2,77,108 11 0

35. The original estimate of Surplus Cash Balance at the close of the year excluding the minimum balance of Rs. 1 lakh required by law and Rs. 11,45,000 reserved from Revenue for payment to the City Improvement Trust was Rs. 30,38,818. The actual Surplus Cash

Balance of Rs. 37,49,482 was thus in advance by Rs. 7,10,664. It also exceeded the figure of the Revised estimate of Rs. 34,25,345 (Rs. 46,78,032 less Rs. 11,52,687 plus Rs. 1,00,000) by Rs. 3,24,137 thus :—

		Rs.		
(1)	Extra income realizations (para. 17) ...	3,22,335		
(2)	Savings in expenditure (para. 25) ...	3,73,533		
(3)	Difference in favour of 1918-19 as compared with 1917-18 in the renewed grants actually required in 1917-18 and those provided in the Revised estimate for 1918-19 (Rs. 11,17,199 less Rs. 10,35,000)	82,199		
(4)	Decrease in value of Reserve Stock ...	11,343	Rs.	7,89,410
Less—				
(1)	Increase in the amount reserved for additional grants (Rs. 24,02,650 minus Rs. 23,23,490).	79,160		
(2)	Increase in the amount reserved for payment to the City Improvement Trust (Rs. 15,19,800 minus Rs. 11,52,687).	3,67,113		
(3)	Purchase of Plant and Machinery (Rs. 86,001 minus Rs. 67,001) ...	19,000		
			„	4,65,273
		Difference Rs.		3,24,137

36. Against the above Surplus Cash Balance of Rs. 37,49,482, grants have already been made this year for Revenue purposes to the extent of Rs. 4,20,711 including a grant of Rs. 2,29,320 for War Allowance to teachers in the Municipal Schools.

Moreover we have estimated a deficit of Rs. 8,17,592 in framing our Budget for 1919-20. The available Surplus Cash Balance is thus reduced to Rs. 25,11,179, out of which we hold in 3½ per cent. Government paper of the book value of Rs. 12,07,300. (Nominal value Rs. 17,49,800).

LOANS RAISED.

37. The total Loans raised from the Public and the amounts spent therefrom are shown below :—

Total Loans raised				Rs. 7,45,00,500-0-0
Less—				
Works executed (Appendix No. 7)—				
(*a*) Loan allotments (Col. 12) ...	Rs.	6,72,28,540-7-0		
(*b*) Savings on different Loans (Col. 12)	„	35,04,795-4-6		
(*c*) Advances from Loan Funds (Col. 14)	„	20,30,252-6-9		
	Rs.	7,27,63,588-2-3		
Less—				
Credit on account of value of old corrugated sheets of the Old Municipal Workshops at Palton Road used in the New Workshops	„	5,312-0-0	„	7,27,58,276-2-3
			Rs.	17,42,223-13-9

In addition to this Rs. 5,99,213-3-10 has been spent up to 31st March 1919 on Loan Works by way of advances from Surplus Cash Balance as per details in Appendix No. 14.

A short-dated Loan of Rs. 30 lakhs was raised during the year on the security of 12 months' bills, without setting aside any Sinking Fund. This amount was borrowed from the Bank of Bombay at a discount of Rs. 5¼% per annum free of Income Tax to the Bank with two options to renew the bills for further periods of one year each at a rate to be mutually arranged between the Municipality and the Bank.

Of the Loan of Rs. 40 lakhs arranged in 1915-16 with the Bank of Bombay, as stated in para. 38 of the report for that year, there were four instalments due to the Bank of which three have been paid off during the year and the last instalment of Rs. 1,00,000 was repaid on 1st May 1919. The debentures thus redeemed have been utilized for investment in Sinking Funds.

DEBT AND SINKING FUNDS.

38. The following statement summarizes the state of the Debt during the year:—

——	Due to Government.	Due to Public.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Balance at 1st April 1918 ...	21,37,633 9 9	7,20,06,000 0 0	7,41,43,633 9 9
Add—			
Loan raised	.....	30,00,000 0 0	30,00,000 0 0
	21,37,633 9 9	7,50,06,000 0 0	7,71,43,633 9 9
Less—			
Repayment in 1918-19	28,994 14 0	2,08,000 0 0	2,36,994 14 0
Balance at 31st March 1919 ...	21,08,638 11 9	7,47,98,000 0 0	7,69,06,638 11 9
Less—			
Outstanding Debentures of the Drainage Loan of 1878 redeemable on or prior to 1st January 1919, covered by renewed grant	.....	52,500 0 0	52,500 0 0
Outstanding Debt at 31st March 1919	21,08,638 11 9	7,47,45,500 0 0	7,68,54,138 11 9
Less—			
Amount of Invested Sinking Fund at 31st March 1919 ...	.....	2,14,19,973 10 4	2,14,19,973 10 4
Net Outstanding Debt	21,08,638 11 9	5,33,25,526 5 8	5,54,34,165 1 5

39. The following statement shows the interest due and paid by the Bank to the Municipal Debenture-holders :—

	Rs. a. p.
Outstanding interest at 1st April 1918	2,78,444 15 9
Interest payable during 1918-19...	31,48,009 0 0
Total interest payable ...	34,26,453 15 9
Less—	
Amount disbursed during 1918-19	31,91,840 10 11
Balance ...	2,34,613 4 10
Less—	
Savings in the provision made to meet payments of interest for broken periods on the 20 lakhs loan for Street Improvements	4 11 2
Outstanding interest covered by renewed grant ... Rs.	2,34,608 9 8

The outstanding represents 6·85 of the total interest payable against 8·28 in 1917-18.

40. From appendix No. 10 it will be seen that including interest due but not collected, the invested balance of the Sinking Funds on 31st March 1919 amounted to Rs. 2,17,07,880-11-1 and was Rs. 1,266-11-1 in excess of what should have accumulated for the purpose for which the funds have been created.

41. The subjoined statement shows the various kinds of paper with the amounts held in the Sinking Fund at 31st March 1919 :—

Name of Sinking Fund.	5 per cent. Municipal Debentures.	4 per cent. Municipal Debentures.	4 per cent. Bombay Port Trust Debentures.	4 per cent. Bombay Improvement Trust Debentures.	4 per cent Government Paper of the Conversion Loan of 1916.	5½ per cent. Indian War Bonds, 1920.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
5 per cent. Municipal Loans Sinking Fund ...	36,60,500	9,96,000	.....	23,39,000	24,00,000	.....	93,95,500
4 per cent. Municipal Loans Sinking Fund 3½ per cent. basis ...	.....	65,56,500	5,53,000	5,39,000	.....	12,33,500	88,82,000
4 per cent. Municipal Loans Sinking Fund 3 per cent. basis ...	.....	27,61,000	.....	.....	.....	.....	27,61,000
3½ per cent. Municipal Loans Sinking Fund	.....	.....	.....	3,83,500	.....	.....	3,83,500
Face Value ...	36,60,500	1,03,13,500	5,53,000	32,61,500	24,00,000	12,33,500	2,14,22,000

As all the securities held in the Sinking Funds are redeemable at par, there is no necessity of providing for any depreciation on that account.

42. The Investment of the Net Premia Fund at 31st March 1919 stood at Rs. 4,34,400 (Market value Rs. 3,04,080) which is quite enough to meet all contingencies.

EXPENDITURE ON LOAN WORKS.

Appendices Nos. 8 and 14.

43. The subjoined statement shows the figures of the Revised Estimates and the Actuals under the Major Heads :—

	FROM LOAN FUNDS.		ADVANCES FROM SURPLUS CASH BALANCE.	
	Revised Estimates.	Expenditure.	Revised Estimates.	Expenditure.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A. Buildings and Sanitary Structures	9,93,100 0 0	4,19,971 4 9	*Cr.* 3,39,800 0 0	*Cr.* 3,39,737 7 7
B. Roads and Overbridges ...	11,96,200 0 0	9,17,061 4 1	5,06,000 0 0	1,59,281 4 1
C. Drainage	7,31,557 5 9	7,40,985 11 5	*Cr.* 1,12,800 0 0	*Cr.* 1,12,596 5 0
D. Water Works	2,24,600 0 0	41,996 6 11	*Cr.* 1,23,400 0 0	*Cr.* 36,420 2 11
E. Cemeteries	58,300 0 0	53,533 10 10	*Cr.* 10,500 0 0	*Cr.* 10,476 4 2
F. Disposal of Town Sweepings.	36,000 0 0	35,985 2 0	.....	.....
G. Miscellaneous	500 0 0	500 0 0	....	.....
Total	32,40,257 5 9	22,10,033 8 0	1,66,300 0 0	*Cr.* 3,48,952 15 7

44. The total excess incurred on individual works carried out from Loan Works over the Revised Estimates amounted to Rs. 1,39,183-0-5 and the total lapses amounted to Rs. 11,69,406-14-2. The net amount lapsed, therefore, was Rs. 10,30,223-13-9 and the principal works on which lapses exceeding Rs. 10,000 occurred were:—

		Rs.
A.	*Buildings, Lands, &c.*—	
	Construction of Buildings for Primary Schools in the City	17,035
	Construction of Chawls for Health Department Bigaries at Palton Road...	18,261
	Construction of Chawls for Halalkhores and Bigaries at Valpakhady	29,764
	Construction of New Municipal Workshops at Foras Road	10,471
	Acquisition of site for the location of the proposed Market at Chowpati	65,700
	Purchase of a plot of land in the Central Agripada Estate of City Improvement Trust for building thereon the Municipal Registration office and Dispensary for the Byculla Ward	13,000
	Acquisition of Mr. Wadia's land at DeLisle Road for the extension of the Arthur Road Hospital.	64,000
	Provision of 40 washing stones and bhatties at the Mahaluxmi Dhobiwada	19,000
	Carrying out improvements, constructing sheep-pens and labourers' chawls, &c., at Bandra Slaughter Houses...	35,000
	Filling in ground at the Bandra Slaughter Houses.	34,959
	Filling in a portion of land at Arthur Road ...	30,000
	Construction of a stable for animals of the carcass establishment at Tardeo Flats	15,000
	Provision of small open spaces	1,00,000
	Extension of Arthur Road Infectious Diseases Hospital	29,968
	Rs.	4,82,158
B.	*Roads and Overbridges*—	
	Street Improvements in different places	23,433
	Construction of Dadar-Kumbharwada Road ...	1,42,957
	Widening and extending Nesbit Road	22,160
	Overbridge at DeLisle Road	13,680
	Paving Frere Road with Indian wood paving blocks	49,088
	Rs.	2,51,318
C.	*Drainage*—	
	Sewerage of the North of the Island	39,408
	Regrading and covering the old drain from Foras Road to Falkland Road and constructing a storm-water drain 2′ × 2′ in Annesley Road	11,838
	Construction of a storm-water drain in Kalachowki Road and Parel Road	23,504
	Providing a covered storm-water drain in Girgaum Road from New Wadi to Thakurdwar Road ...	25,340
	Victoria Gardens Drainage Works for stopping the breeding of mosquitoes	13,751
	Rs.	1,13,841

D. Water Works—	Rs.
Laying 9″ and 5″ mains on the estate of the City Improvement Trust between Kingsway and the G. I. P. Railway Dadar Station...	31,329
Laying water mains and fire service hydrants on Ballard Estate	44,000
Laying a 6″ water main and provision of fire hydrants in Lady Hardinge Road	12,605
Laying water mains in the new Roads constructed by the City Improvement Trust in the Agripada Estate	58,740
	Rs. 1,46,665

The total lapses over the Revised Estimates incurred on individual works executed out of advances from Surplus Cash Balance amounted to Rs. 5,15,252-15-7 and the principal works on which lapses occurred were :—

	Rs.
Widening of Church Gate Street and Armenian Lane ...	3,11,972
Constructing a mechanical filtration plant at Tulsi Lake for purifying water, &c.	1,41,986
Tansa Water Works cost of making a survey of the country through which a new aqueduct could be constructed ...	15,563
Construction of a new straight road from the junction of old Purbhadevi Road and the proposed Foras Road to join the widened Mahim Bazar Road	43,671
Rs.	5,13,192

PLAGUE EXPENDITURE.

45. The charges incurred as compared with the preceding year and the reasons for the decrease have been shown in paras. 15 and 32.

The total expenditure incurred on Plague from the commencement of plague operations to the close of the year under report aggregated Rs. 84,86,063 and was financed as under :—

		Rs.
(1)	From the 20 Lakhs Plague Loan	20,00,000
(2)	From the Government contribution	14,50,000
(3)	Amount recovered from the City Improvement Trust under Section 79 (3) (*b*) (*i*) and (*ii*) of their Act IV of 1898 and transferred to meet the liability incurred out of Loan Funds	16,00,000
(4)	From Current Revenue	34,36,063
	Total Rs. ...	84,86,063

LIABILITIES AND ASSETS.

Appendices Nos. 5 and 6.

46. It will be seen that the gross revenue liabilities of the Corporation stood at Rs. 64,99,280-11-9, the assets being Rs. 1,11,21,725-7-5. The difference of Rs. 46,22,444-11-8 represents the Surplus Revenue as shown in Appendix No. 3.

47. The following is a summary of the Revenue Assets :—

		Rs.	a.	p.
(1)	Cash Balance in Office and Bank Treasuries ...	5,22,295	8	5
(2)	Surplus Funds Deposits and Investments	68,88,357	11	4
(3)	Special Funds Investments	12,93,969	1	1
(4)	Paper Deposits with the Bank of Bombay lodged by Contractors or presented for the maintenance of public monuments	3,76,200	0	0
(5)	Advances recoverable	12,52,253	5	8
(6)	Reserve Stock	6,86,961	3	4
(7)	Plant and Machinery	86,001	0	0
(8)	Stores sold but not adjusted	15,687	9	7
	Total Rs. ...	1,11,21,725	7	5

48. The gross Capital liabilities of the Corporation stood at Rs. 7,86,21,928-1-8 at the close of the year under report, and the assets at Rs. 11 32,94,369-7-5, resulting in a surplus of Rs. 3,46,72,441-5-9 the details of which are shown in Appendix No. 6.

49. The following are the Capital assets of the Corporation :—

		Rs.	a.	p.
(1)	Block Account (including unbooked property) ...	8,80,37,408	1	4
(2)	Debt due by the City Improvement Trust for lands transferred to them	17,15,289	5	11
(3)	Municipal Land and Building Fund	3,79,474	8	1
(4)	Sinking Fund Investments	2,14,19,973	10	4
(5)	Loan Funds Investments	17,42,223	13	9
	Total Rs. ...	11,32,94,369	7	5

INVESTMENTS AND INVESTED BALANCES.

50. In the original Budget Estimates a sum of Rs. 1,70,000 was estimated to be derived from interest on investments of Surplus Loan and other Balances. It was increased to Rs. 2,47,500 in the Revised Estimates. The actual realizations, however, amounted to Rs. 3,04,518 on account of investments made in the latter part of the year of the balances of the temporary loan of Rs. 30 lakhs borrowed from the Bank of Bombay during the year.

This income of Rs. 3,04,518 was derived from the following sources :—

		Rs.
(1)	On Current Account Deposits at a rate between 2 per cent. and 3 per cent.	13,155
(2)	On Fixed Deposits	1,14,626
(3)	On Investments in Government and other Securities ...	1,27,643
(4)	On Government Treasury Bills	49,094
	Total Rs. ...	3,04,518

51. Inclusive of investments on account of Sinking, Insurance, Worn-out Water Mains Renewals, Net Premia, and Lands and Buildings Funds, the total sum of investment and reinvestment arranged for by this Department during the year aggregated Rs. 1,65,73,400 :—

		Rs.
(1)	Current Account Deposits	27,50,000
(2)	Fixed Deposits	91,00,000
(3)	Government Treasury Bills	13,00,000
(4)	Sinking and Special Funds	34,23,400
	Total Rs. ...	1,65,73,400

The average rate of interest on Fixed Deposits was 5·17 per cent. against 5·09 per cent. in the preceding year. The rates realized for Fixed Deposits ranged from 3¾ per cent. to 6½ per cent. The maximum rate realized in the preceding year was 7 per cent.

SPECIAL FUNDS.

Appendices Nos. 4 and 5.

52. The opening and closing balances to the credit of the different Reserve Funds, the additions made thereto and the withdrawals made therefrom during the year are shown in Appendix No. 4. The details of the different investments and the current market value are shown in Appendix No. 5A while Appendix No. 5 contains the total amount of Paper held in each Fund and the Cash Balance to its credit in the Bank of Bombay.

The Municipal Land and Building Fund will be found in Appendices Nos. 4 and 6.

WATER WORKS ACCOUNT.

Appendix No. 12.

Income and Expenditure Account.

53. The following statement shows the income and expenditure for the year as contrasted with the original estimates and the figures for the preceding year:—

	Budget Estimates 1918-19.	Actuals for 1918-19.	Actuals for 1917-18.	Increase or decrease.	
				As compared with the Budget Estimates.	As compared with the previous year.
	Rs.	Rs.	Rs.	Rs.	Rs.
Income	...(*a*) 27,75,000	(*a*) 29,77,602	26,97,720	+ 2,02,602	+2,79,882 (*b*)
Expenditure.	24,88,500	24,48,818	23,38,411	— 39,682	+1,10,407 (*c*)
	Surplus Rs...	5,28,784	3,59,309	*plus* Rs.	1,69,475

(*a*) This does not include anything for interest on invested balances.

(*b*) Due to increased assessment of properties and increased consumption of water by trades, Railways and Port Trust.

(*c*) Increase principally due to payment of arrears of interest and more repayment of the debentures of the Water Works portion of the Drainage Loan of 1878 than in the preceding year.

54. As required by Corporation Resolution No. 6570 of 15th February 1912, a detailed statement of income realized for the year under report as compared with the preceding five years is attached to Appendix No. 12.

ASSETS AND LIABILITIES.

Appendix No. 13.

55. The liabilities at the beginning of the year stood at Rs. 3,24,42,971-4-2. They were reduced at the close of the year to Rs. 3,23,36,767-12-5, owing to the payment of Rs. 28,994-14-0 to Government towards the reduction of the Vehar Debt and of Rs. 77,208-9-9 towards the repayment of the Water Works portion of the Drainage Loan of 1878.

The assets aggregated Rs. 4,69,59,361-12-9 against Rs. 4,62,83,244-1-5 at the close of the previous year, showing an increase of Rs. 6,76,117-11-4, and were made up of (1) works executed out of Loan and Reserve Funds, (2) additions to the Sinking Fund Investments, (3) the inclusion of works met out of (*a*) the contribution from the G. I. P. Railway for removing and relaying 32" Vehar Main at Coorla and (*b*) the Worn-out Water Mains Renewal Fund, and (4) the premia received on the 147 lakhs Tansa Water Works Loan.

From Appendix No. 13, it will be seen that the excess of assets over liabilities amounted to Rs. 59,48,833-12-9 after providing Rs. 76,86,888-5-3 for the Sinking Fund and Rs. 8,02,328-11-10 for Special Funds.

SUSPENSE ACCOUNT.

A.—Deposits.

56. The Cash Deposits outstanding at the close of the year aggregated Rs. 10,72,828-2-10 against Rs. 6,68,886-11-10 in the year 1917-1918, and were made up of:—

		Rs.	a.	p.
(1)	Cash Deposits from Contractors	1,81,003	9	9
(2)	Cash Deposits received through Departmental Officers	3,20,342	13	4
(3)	Other Cash Deposits	5,08,197	15	9
(4)	Deposits on account of works performed for private parties	63,283	12	0
	Rs.	10,72,828	2	10

In addition to this, the balances of miscellaneous cash deposits amounted to Rs. 92,423-11-2. This figure includes Rs. 76,929-9-0 on account of subscriptions from Municipal employes towards the purchase of War Loan Bonds.

B.—Inter-Departmental Charges.

1. *Workshops.*

57. The opening balance was Rs. 97,890-12-9 or Rs. 65,637-13-5 more than in the preceding year.

The cost of labour and supervision staff employed and of stores used on the works turned out in the Shops during the year amounted to Rs. 3,95,074-1-8 against Rs. 2,74,442-0-11 in the previous year. The total outlay in the Workshops during the year, together with the opening balance aggregated Rs. 4,92,964-14-5. The net recoveries during the year amounted to Rs. 4,15,443-13-10 (Gross Rs. 4,45,990-6-2 *minus* profit Rs. 30,546-8-4) and the outstanding at the end of the year including incomplete jobs and value of stores issued in March 1919 aggregated Rs. 77,521-0-7.

The outstandings are made up of the following items:—

	Rs.	a.	p.
Stores issued in March 1919 and charged in the accounts for 1918-1919 under the system of stores accounts	17,909	4	4
Outstanding bills	52,389	4	8
Incomplete jobs	7,222	7	7
Rs.	77,521	0	7

58. The supervision charges and all jobs at 25 per cent. amounted to Rs. 78,126-14-11. Deducting therefrom the sum of Rs. 550 paid for the purchase of a cupola and adding Rs. 3,826-5-9 and Rs. 600 realized by the sale of unserviceable articles and Air

Compressor Plant respectively and Rs. 610-8-11 realized by the hire of plant, &c., the gross earnings of the Shops aggregated Rs. 82,613-13-7 from which the following Shop and supervision, &c., charges amounting to Rs. 52,067-5-3 had to be met:—

		Rs.	a.	p.
(1)	Supervising Establishment, Rent and Contingencies	20,106	15	2
(2)	Shop charges	31,960	6	1
	Rs.	52,067	5	3

The net profit of the Workshops was thus Rs. 30,546-8-4 as against Rs. 12,233-7-2 for the last year, the reason for the increase being that more jobs were carried out in the year under report.

In arriving at this result no portion of the salary of the Deputy Executive Engineer, Mechanical Branch, no Interest and Sinking Fund charges on capital, and no depreciation on buildings and machinery has been allowed for.

Other Works.

59. The outstanding balances on 31st March 1919, in respect of Departmental and Private Works executed by different branches of the Executive Engineer's Department (excluding Workshops) and the Health Department are contrasted below with those on 31st March 1918:—

	Balance on 31st March 1918.	Balance on 31st March 1919.	More.	Remarks.
A.—Departmental Works.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
(1) Drainage	1,241 8 9	(*a*) 1,851 10 3	610 1 6	(*a*) Out of this, Rs. 615-1-0 represents the value of stores issued in March 1919, bills for which are to be adjusted in 1919-20.
(2) Roads and Buildings Branch ...	3,401 4 7	13,583 2 2	10,181 13 7	
(3) Water Works Branch	1,365 10 0	(*b*) 12,347 5 6	10,981 11 6	(*b*) Out of this, Rs. 2,170-0-11 represents the value of stores issued in March 1919, bills for which are to be adjusted in 1919-20.
Rs. ...	6,008 7 4	27,782 1 11	31,773 10 7	
B.—Private Works.				
Drainage Branch.				
On account of Ordinary Works ...	18,759 12 3	(*c*) 20,789 15 11	2,030 3 8	(*c*) Out of this, Rs. 1,680-15-0 represents the value of stores issued in March 1919, bills for which are to be adjusted in 1919-20.
Roads and Buildings Branch ...	15,663 12 11	33,527 5 8	17,863 8 9	
Water Works Branch...	4,312 2 6	(*d*) 17,675 8 8	13,363 6 2	(*d*) Out of this, Rs. 1,177-6-2 represents the value of stores issued in March 1919, bills for which are to be adjusted in 1919-20.
Health Department (Removing Chokes).	711 2 11	(*e*) 1,832 10 3	1,121 7 4	(*e*) Out of this, Rs 585 10 6 represents the value of stores issued in March 1919, bills for which are to be adjusted in 1919-20.
Total Rs. ...	39,446 14 7	73,825 8 6	34,378 9 11	

60. The outstandings in respect of Departmental Works are due to the fact that several bills had to be kept back on account of excesses over grants. These will be adjusted on funds becoming available. The outstandings in respect of Private Works, Roads and Buildings Branch are due to bills against the Bombay Electric Supply and Tramways Company, Limited, and to those against the houseowners of private lanes not having been fully recovered before the close of the year. The outstandings in respect of Private Works, Drainage Branch, are due to bills against houseowners for providing drainage arrangements in private streets in the case of which no deposit can be recovered in advance.

With regard to outstandings in respect of Water Works Branch, a bill amounting to Rs. 9,498-3-0 for making water connection to the Famine Camp at Chembur was preferred against the Executive Engineer, Thana, but he having repudiated his liability for the payment, the question of adjustment of the cost is under consideration.

Advances to Municipal Officers.

61. The outstandings on 31st March 1919 aggregated to Rs. 40,505-7-2 against Rs. 36,066-14-11 on 31st March 1918. Rs. 6,221 represents the sum allotted to the different Heads of Departments as standing advances for contingent expenses ; Rs. 3,000 is the sum advanced to meet legal charges in connection with the acquisition of property of Church Gate Street ; Rs. 4,675 represents the law charges incurred in connection with the purchase of the Bombay Tramways; Rs. 10,000 were advanced to meet the charges for feeding immigrants from famine districts which have been adjusted during 1919-20; Rs. 3,000 have been advanced to the Superintendent of Markets to purchase grain for the shops opened by the Municipality to meet the requirements of the poor population ; Rs. 9,200 have been advanced to Deputy Executive Engineer, Mechanical Branch, for the purchase of coal from Government which has to be adjusted this year. The remaining balance is comprised of small items which call for no remarks.

Advances to Contractors.

62. The outstanding at the close of the year amounted to Rs. 389-6-2 against Rs. 1,376-12-6 at the end of 1917-18.

Miscellaneous.

63. Out of the outstandings of Rs. 2,50,986-9-4, the following are the principal items :—

	Rs.	a.	p.
(1) Acquisition of lands beyond the regular line of streets to be adjusted against the sale proceeds of the lands ...	2,08,514	14	11
(2) Laying pipe drains in house gullies	21,375	10	0
(3) Arbitration and other expenses in connection with the purchase of Tramways	5,623	14	10
(4) Expenditure in the suit filed by the Tramways Company against the Municipality	4,410	5	7
(5) Cost of filling in the Framji Kavasji Tank to be subsequently adjusted against the sale proceeds of the reclaimed land	3,832	6	2
(6) Improving the passage off Fergusson Road	5,557	2	6

The amount of Items Nos. 1 and 5 will be adjusted when the land is sold. The adjustment of Items Nos. 2 and 6 has yet to be effected. As regards Items Nos. 3 and 4, the Municipal Solicitors have been instructed to negotiate with the Tramway Company.

Advances from Surplus Cash Balance for New Works to be subsequently provided for under New Loans to be raised.

64. The total unadjusted expenditure upto 31st March 1919, which amounted to Rs. 5,99,213-3-10 will be found in Appendix No. 14.

Reserve Stock.

65. The receipts of General Stores during the year as per my books aggregated Rs. 9,79,603-15-2 and the issues Rs. 9,91,667-3-6, thus resulting in a decrease of Rs. 12,063-4-4 in the balance of current stores. There was a reduction during the year in the balance of Surplus and Obsolete Stores from Rs. 3,085-4-0 to Rs. 2,571-14-10.

66. The verification of stock at the Central stores, the Bellasis Bridge Pipe Depot, the Municipal Workshops and on the Line was commenced by Mr. Vacha at the end of the year and a report of the results will be made to the Corporation in due course.

67. The printing of the Stores vocabulary was completed during the year and Heads of Departments were supplied with copies.

68. The balances of the general, *i.e.*, current serviceable stores are compared below for the last five years :—

	Rs.	a.	p.
Balances at the close of 1914-15	2,78,486	2	0
Do. do. 1915-16	2,54,806	1	11
Do. do. 1916-17	4,39,210	1	3
Do. do. 1917-18	5,87,969	10	11
Do. do 1918-19	5,75,906	6	7

69. The balances of Reserve Stock in hand at the close of the year as per the general books of this office amounted to Rs. 6,86,961-3-4 against Rs. 6,98,303-12-7 at the close of the preceding year, showing a decrease of Rs. 11,342-9-3 as detailed below :—

DEPARTMENTS.	1917-1918.			1918-1919.			Increase or Decrease.
	Serviceable Stores.	Surplus and Obsolete Stores.	Total.	Serviceable Stores.	Surplus and Obsolete Stores.	Total.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1. General Stores Department.	5,87,969 10 11	3,085 4 0	5,91,054 14 11	(a)5,75,906 6 7	2,571 14 10	5,78,478 5 5	— 12,576 9 6
2. Water Works Imprest ...	4,918 11 4	.....	4,918 11 4	5,344 7 7	.....	5,344 7 7	+ 425 12 3
3. Executive Engineer's Department	933 6 0	.....	933 6 0	1,076 11 0	.....	1,076 11 0	+ 143 5 0
4. Line Suspense Account ...	1,01,396 12 4	.....	1,01,396 12 4	1,02,061 11 4	.....	1,02,061 11 4	+ 664 15 0
Total ...	6,95,218 8 7	3,085 4 0	6,98,303 12 7	6,84,389 4 6	2,571 14 10	6,86,961 3 4	— 11,342 9 3

(a) The difference between this amount and that shown by the Storekeeper is Rs. 40,201-8-2 which is due to the non-adjustment of the value of stores issued to the Deputy Health Officers, the Deputy Executive Engineer, Mechanical Branch, Drainage Engineer, the Hydraulic Engineer, &c., on account of grants having been found insufficient and to some minor adjustments which will be made in the accounts for 1919-20.

STREET IMPROVEMENTS.

70. The amounts made available on account of acquisition of set-backs during the year were as under :—

	Rs.	a.	p.
Budget provision from Revenue	1,00,000	0	0
Renewed grant	4,752	1	4
Additional grant made by appropriating towards Street Improvements, the sale proceeds of set-forward lands and indemnity moneys recovered for works permitted within the regular line of the street during 1917-18	43,221	13	1
Budget provision from Capital	2,29,000	0	0
Rs.	3,76,973	14	5

Against this sum, Rs. 3,52,137-12-8 were actually paid, leaving a balance of Rs. 24,836-1-9 which has been renewed for expenditure during 1919-20.

After allowing for all ascertained time-barred claims, the undischarged commitments upto 31st July 1919 in regard to set-backs already acquired and sanctioned to be acquired amounted to Rs. 7,90,146 against which we have sanctioned funds aggregating Rs. 1,22,525 and a sum of Rs. 27,550-14-11 realized by the sale proceeds of set-forward lands and recoveries of indemnity moneys during 1918-19 which will go to meet the set-back payments.

The excess of liabilities over funds available thus amounts upto 31st July 1919 to Rs. 6,40,070. An addition of at least 30 per cent. has to be made to this to provide for increase in rates when the time for payment of claims actually matures. We have to remember also that further liabilities will be sanctioned during the remainder of the year 1919-20 for set-backs.

GENERAL FINANCIAL POSITION.

71. On the latest Budget data our Income and Expenditure and margin of borrowing powers for general purposes except Fire Brigade and Water Works may be stated as follows :—

Income as per Budget for 1919-20		Rs.	1,71,15,000
Less—			
Arrears of General Tax payable by the Port Trust in 1919-20		Rs.	4,32,000
		Rs.	1,66,83,000
Deduct—			
Fire Tax ...	Rs. 2,80,900		
Water Tax ...	„ 29,45,000		
		„	32,25,900
Balance ...		Rs.	1,34,57,100
Add—			
Difference between General Tax at 9½ per cent. and the maximum at 12 per cent. leviable under the Act		Rs.	17,61,605
Total Income ...		Rs.	1,52,18,705
Expenditure as per Budget for 1919-20		Rs.	1,79,32,592
Deduct—			
Fire Brigade—			
(*a*) Ordinary expenditure	Rs. 2,15,274		
Debt	„ 34,796		
	Rs. 2,50,070		
Water Works—			
(*b*) Ordinary Expenditure.	Rs. 9,75,335		
Proportion of General Superintendence and Collection Charges...	„ 1,25,084		
Debt	„ 17,87,281		
	„ 28,87,700		
	„	31,37,770	
Total Expenditure ...		Rs.	1,47,94,822
Balance of taxation against which loans can be raised for purposes other than Fire Brigade and Water Works		Rs.	4,23,683

Against this balance loans can be raised to the extent of Rs. 54,46,000 of a thirty years' currency at 6 per cent. with the Sinking Fund at 4 per cent. per annum, compound interest.

It has to be remembered, however, that included in the expenditure are a number of items of abnormal expenditure such as War Allowance, Grain Compensation, and Special Grants on account of high prices of materials, labour, cartage, feed, &c., and considering our actuals of income and expenditure for the past year, I think, we can say that the margin of balance would normally be much more than that shown above and that loans could be raised to the extent of over a crore. In addition we could, if necessary, raise very large sums for Water Works, limited by the tax the Corporation would be prepared to levy for the purpose, and for Fire Brigade purposes we could raise a loan of Rs. 40 lakhs on the same basis.

FIRE BRIGADE.

72. During the year the Fire Tax was levied at ⅝ per cent. The following statement shows the Income and Expenditure for the year as contrasted with the figures for the preceding year :—

—	Actuals for 1918-19.	Actuals for 1917-18.	Excess of 1918-19 over 1917-18.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Income	2,84,962 8 2	2,16,129 10 6	68,832 13 8
Expenditure including New Works and the interest and Sinking Fund Charges on Fire Brigade Loan and on a portion of the 55 Lakhs Loan ...	2,57,943 9 6	2,22,211 11 4	35,731 14 2
Surplus .. Rs.	27,018 14 8	.....	.....

The following statement shows the accumulation of surplus from Fire Tax upto 31st March 1919 :—

Balance at 1st April 1918	Rs.	1,03,599 9 8
Add—		
Surplus for the year 1918-19	,,	27,018 14 8
	Rs	1,30,618 8 4
Less—		
Amount to be renewed in 1919-20 on account of outstanding liabilities	,,	31,339 14 11
Actual surplus on 31st March 1919	Rs.	99,278 9 5

REVENUE AND REFUND AUDIT (ASSESSMENT AND COLLECTION DEPARTMENT).

QUARTERLY AUDIT OF BILLS OUTSTANDING.

73. In the year under report the balances of outstanding bills at different ward offices examined at the end of each quarter totalled 31,641 representing Rs. 45,97,859-4-4, as shown in the sub-joined statement. They were duly checked in detail with the Ward Collection Books (Form 16) and the Head Office Accounts (Forms 8 and 9):—

Ward.	Balances examined on 3rd April 1918.		Balances examined on 1st July 1918.		Balances examined on 1st October 1918.		Balances examined on 3rd January 1919.		Total balances examined during the year.	
	No. of Bills.	Amount.	No. of Bills.	Amount.	No. of Bills.	Amount.	No. of Bills.	Amount.	No. of Bills.	Amount.
		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.
A ...	216	15,197 4 0	2,436	3,59,686 6 2	590	38,778 10 8	4,059	6,47,916 11 10	7,301	10,61,579 0 8
A (GPR).	60	14,468 1 11	658	4,18,759 14 2	187	2,25,096 8 7	281	5,03,518 9 10	886	11,62,843 2 6
A (T) ...	29	3,962 6 10	378	86,343 8 6	92	14,961 7 1	567	1,69,029 0 0	1,066	2,74,296 6 5
B ...	75	7,643 6 0	2,088	2,91,763 2 9	193	17,3 8 0 9	3,651	5,16,496 8 3	6,007	8,33,261 1 9
C ...	45	2,666 14 11	1,030	1,16,450 9 8	221	15,641 2 3	2,794	3,16,802 3 5	4,090	4,51,560 14 3
D ...	177	14,571 3 5	2,119	1,79,997 0 9	333	17,996 10 5	2,394	2,11,581 10 10	5,023	4,24,146 9 5
E ...	103	4,348 4 1	900	63,354 14 5	160	8,079 14 11	1,627	1,27,672 5 8	2,790	2,23,455 7 1
F ...	29	2,734 12 3	644	19,986 4 8	36	6,379 11 0	677	30,825 10 5	1,386	60,196 6 4
G ...	44	2,535 2 5	1,369	56,141 2 4	110	1,187 10 10	1,569	52,656 4 4	3,092	1,12,520 3 11
Total...	778	68,127 7 10	11,322	16,97,482 15 5	1,922	3,45,679 12 6	17,619	25,76,569 0 7	31,641	45,97,859 4 4

DEMANDS, COLLECTIONS AND BALANCES.

74. The demands, collections and balances at the close of the year, audited in the manner contemplated by the Manual, are scrutinized below :—

	General Tax.	Water Tax.	Halalkhore Tax.	Vehicle and Animal Tax.	Total.
	Rs. a. p.	Rs a. p.	Rs. a. p.	Rs. a. p.	Rs a. p.
1. Total demands including previous year's outstandings and contributions from Government and Port Trust.	80,35,491 15 0 9,93,128 0 0 90,28,619 15 0	32,02,404 6 3	21,00,345 1 3	3,21,237 0 0	1,36,59,478 6 6 9,93,128 0 0 1,46,52,606 6 6
2. *Deduct* bills recalled which were either cancelled or in lieu of which amended bills were issued.	9,88,265 15 2	2,91,214 6 9	2,29,145 7 0	4,643 5 4	15,13,269 2 3
3. Net demand ...	80,40,353 15 10	29,11,189 15 6	18,71,199 10 3	3,16,593 10 8	1,31,39,337 4 3
4. (*a*) Collection paid into the Treasury including departmental adjustments.	75,16,968 14 11	28,62,861 11 6	18,39,670 7 7	3,05,909 0 0	1,25,25,410 2 0
(*b*) Irrecoverable bills written off.	.....	.....	.....	191 0 0	191 0 0
(*c*) Balance at the close of the year.	5,23,385 0 11	48,328 4 0	31,529 2 8	10,493 10 8	6,13,736 2 3
Rs. ...	80,40,353 15 10	29,11,189 15 6	18,71,199 10 3	3,16,593 10 8	1,31,39,337 4 3

The collections were checked with the receipt book under each head of revenue and the balances by an examination of the bills actually on hand in the several ward offices on the 1st April 1919. They were found to be correct.

Refunds on Account of Vacancy, &c.

75. The sub-joined table shows the number of claims for refund on account of vacancy and over-collection that were scrutinized during the year. In the previous year, the claims numbered 970 representing Rs. 34,431-1-10.

Ward.	No. of claims.	Amount of refunds sanctioned.						
		General Tax.	Water Tax.	Halalkhor Tax.	Wheel Tax.	Meter Hire.	Notice Fee.	Total.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs a p.	Rs. a. p.
A	91	4,256 14 9	1,742 4 0	1,910 6 5	32 0 0	.....	.....	7,941 9 2
B	85	2,759 13 3	787 9 1	1,279 9 7	.....	5 0 0	.....	4,831 15 11
C	150	3,332 15 0	959 8 8	1,104 10 6	17 0 0	.....	.....	5,614 2 2
D	163	1,963 7 4	286 9 6	776 3 4	47 0 0	3 0 0	.....	3,081 4 2
E	60	906 0 7	213 2 3	232 11 5	24 0 0	.....	.....	1,375 14 3
F	39	823 13 7	451 4 6	327 10 11	.....	.....	.....	1,602 13 0
G	65	453 10 7	100 8 9	149 10 5	.....	12 0 0	1 0 0	716 13 9
G. P. R. ...	20	5 13 2	.....	98 1 0	.....	24 12 4	.....	128 10 6
T. Sec.... ...	99	804 9 3	213 9 3	256 9 3	.....	.....	.....	1,274 11 9
Total ...	772	15,513 1 6	4,754 8 0	6,135 8 10	120 0 0	44 12 4	1 0 0	26,567 14 8

Drawback Claims.

76. The number of claims to one-fifth drawback of the general tax scrutinized during the year was as under :—

Ward.	1st half of 1918-19.		2nd half of 1918-19.		Total.	
	No. of claims.		No. of claims.		No. of claims.	
	Received.	Admitted.	Received.	Admitted.	Received.	Admitted.
A	160	71	116	37	276	108
B	381	109	294	89	675	198
C	652	234	400	115	1,052	349
D	496	173	392	156	888	329
E	701	375	522	202	1,253	577
F	284	157	222	93	506	250
G	416	237	346	183	762	420
Properties acquired by the C. I. Trust.	311	224	284	215	595	439
G. P. R.	.....	.....	113	49	113	49
Total ..	3,431	1,580	2,689	1,139	6,120	2,719

In the previous year the claims received aggregated 7,578 and those admitted were 4,053.

Assessment Book.

77. The Assessment Book was subjected to scrutiny and it was ascertained that no property liable to any authorized tax or charges leviable in lieu thereof had escaped assessment.

Vehicle and Animal Tax Book.

78. The register of vehicle and animal tax (Form No. 4) was examined and the entries therein were checked with the Ward Superintendents' quarterly reports and the owners' returns. The table given below shows the number of entries scrutinized during the year :—

Ward.	No. of Entries.				
	1st quarter.	2nd quarter.	3rd quarter.	4th quarter.	Total.
A	1,182	1,348	1,438	1,521	5,489
B	667	770	834	876	3,147
C	964	1,060	1,144	1,206	4,374
D	2,039	2,346	2,508	2,634	9,527
E	676	788	852	967	3,283
F	284	321	351	415	1,371
G	271	300	318	376	1,265
Total ...	6,083	6,933	7,445	7,995	28,456

Public Land Conveyances.

79. The revenue derived during the calendar year 1918 from the tax on Public Land Conveyances licensed by the Police Commissioner under Bombay Act VI of 1863 and on taxi-cabs during the official year under report was audited. The total number of vouchers was 12,810 which were duly checked with the register maintained in this office.

Amendments in Valuations.

80. The subsequent changes during the course of the year in the rateable value of properties and alterations in demands made through Increase and Decrease Registers (Form 11, 11-B and 11-C) were duly checked with the Tabulated Ward Reports and audit note-books kept in this office. The proposals for modification of valuation during the course of the year under section 167 of the Act, scrutinized by this office aggregated 1,082.

Write-off of Irrecoverable Bills.

81. 18 irrecoverable bills on account of Wheel Tax aggregating Rs. 191 together with the cost of recovery *viz* annas 4 were written off.

Other Departments.

82. The revenue books maintained in other departments of the Municipality were checked monthly with the permits, the counterfoils of receipts and the licenses and with other papers produced in support of the vouchers and the collection paid into the Municipal Treasury duly verified.

Executive Engineer's Department (including General, Roads and Buildings and Drainage Departments).
Hydraulic Engineer's Department.
Health Department (including the Ward Offices of the Deputy Health Officers and the Conservancy Superintendent.)
Vaccination Department, Markets and Slaughter Houses, License Department, and Victoria Gardens.

83. The following statement shows the number of vouchers and the amounts represented by them that were audited during the year :—

Name of Departments.	Number of vouchers examined.	Amount.
		Rs. p. a.
Executive Engineer's Department (including General, Streets and Buildings and Drainage Departments).	5,842	5,45,792 3 11
Hydraulic Engineer's Department	1,821	1,47,193 15 8
Health Department (including the Ward Offices and the Conservancy Superintendent Office).	24,017	1,68,152 5 10
Vaccination Department	1,046	15,380 5 3
Markets and Slaughter Houses	76,779	7,28,671 12 3
License Department	12,392	1,27,915 8 0
Victoria Gardens	37,631	10,656 3 6

PERMITS ISSUED UNDER SECTION 390 OF THE ACT.

84. The permits issued under Section 390 of the Municipal Act in respect of newly established factories totalled 109 and brought in a revenue of Rs. 2,650.

RENT BILLS AGAINST THE BOMBAY TELEPHONE CO.

85. As the proposal to change the mode of charging ground rent has been recently sanctioned by the Corporation under their Resolution No. 5187 of 31st October 1918 and as the Bombay Telephone Company have paid a sufficient deposit of Rs. 95,000 (their account not being ready for our inspection) to cover the rent due from them for the calendar years 1915, 1916, 1917 and 1918, the preparation of the bills for these years has been held in abeyance.

RENT BILLS AGAINST THE BOMBAY TRAMWAYS COMPANY.

86. Two half-yearly bills (one for the period ending 1st August 1918 and the other for the period ending 1st February 1919) for Rs. 58,743-12-3 were checked by this office in the year under report and have been duly paid by the Company and credited to Municipal Fund.

FINES LEVIED BY THE PRESIDENCY MAGISTRATES.

87. The total amount of fines recovered during the year under report in respect of offences committed against the several provisions of the Municipal Act. was Rs. 48,642-8-6 which was duly paid into the Municipal Treasury. The cases in which the fines remained outstanding were brought to the notice of the heads of the Departments concerned.

88. No very serious errors or irregularities were discovered in the course of audit.

Personal.

89. During the year under review Mr. W. E. Waite, Chief Accountant was in charge.

I continued absent on Military service during the year returning to duty as Deputy Accountant in April 1919.

Mr. Waite has expressed his appreciation of the services of his staff and of the loyal assistance given to him both by the Senior Officers and the Junior members of the staff.

COST OF DEPARTMENT.

90. The cost of the department in 1918-19 and 1897-98, and the percentage of cost to Income and Expenditure are compared below :—

YEARS.	Cost of Staff at maximum rate of pay.	Income.	Expenditure.	Percentage of Cost of Staff to Income.	Percentage of Cost of Staff to Expenditure.
	Rs.	Rs.	Rs.		
1897-98	62,754	(*a*) 68,98,064	(*b*) 68,86,527	·95	·91
1918-19	1,27,956	1,73,74,184	1,70,26,649	·74	·75
	65,202 or 103·9 per cent. increase.	1,04,76,120 or 151·87 per cent. increase.	1,01,40,122 or 147·25 per cent. increase.	22·11 Decrease.	17·58 Decrease.

(*a*) Excluding a rebate of Rs. 4,87,055 to current revenue in respect of plague expenses debited to revenue in 1896-97 and Rs. 1,10,442 on account of interest on the investments of Sinking and Special Funds.

(*b*) Excluding Rs. 5,00,000 on account of plague expenses debited to revenue in 1897-98, which were subsequently transferred to Loan Funds and Rs. 1,10,442 on account of investment of interest realized on Sinking and Special Funds.

The percentage of cost of staff to Income and Expenditure for the year 1917-18 was ·66 and ·69 respectively.

91. The following are the Appendices attached to my report :—

No. 1 —Statement showing the Income realized during 1918-19 compared with the estimates for that year as also with the actuals for the preceding year.

No. 2.—Statement showing the expenditure during 1918-19 as compared with the final sanctioned grants and the actuals for the preceding year.

No. 3.—Statement of Surplus Revenue Fund.

No. 4.—Statement of Special Funds for 1918-19.

No. 5.—Balance Sheet (Revenue) as at 31st March 1919.

No. 5-A.—Comparison of Face, Purchase and Market Values at 31st March 1919 of the different securities held in the Special Funds.

No. 6.—Balance Sheet (Capital Funds) as at 31st March 1919.

No. 6-A.—Comparison of Face, Purchase and Market Values at 31st March 1919 of the different securities held in the Sinking Funds.

No. 7.—Statement showing (1) outstanding Municipal Loans, (2) the expenditure incurred against each of them, (3) the amounts withdrawn temporarily from their unexpended balances to meet the cost of new works, etc., and (4) invested balances of the loans on 31st March 1919.

No. 8.—Block Account, showing details of Capital Expenditure up to 31st March 1919.

No. 9.—Statement showing the outstanding Loans due by the Municipality on 31st March 1919.

No. 10.—Statement showing the amounts which should have accumulated in the Sinking Fund, on the basis of the fixed instalments and the amounts actually invested up to 31st March 1919.

No. 11.—Statement showing the interest outstanding on different Municipal Loans on 31st March 1919.

No. 12.—Water Works, Income and Expenditure Account, including statement of income realizations for 1918-19, and preceding five years from water supply through meters.

No. 13.—Water Works Assets and Liabilities.

No. 14.—Statement showing the expenditure advanced from Surplus Cash Balance for new works to be subsequently provided for under a new Loan to be raised hereafter.

No. 15.—Statement of Town Duties collected and refunds allowed in 1918-19.

No. 16.—Statement of Net Town Duties collected during the ten years ending 1918-19.

No. 17.—Statement of gross Town Duties levied during the five years ending 31st March 1919, refunds allowed and the net income realized during that period.

No. 18.—Statement showing Town Duty Collection from each source month by month with the refunds admitted for the year 1918-19, as contrasted with those for the year 1917-18.

No. 19.—Statement showing the expenditure incurred on new works (revenue) as compared with the sanctioned grants and the unexpended balances renewed.

No. 20.—Statement of Liabilities incurred on Street Improvements and the rates and amounts actually paid.

No. 21.—Statement of Income of the Bombay Municipality from 1865 to the close of the financial year 1918-19.

No. 22.—Statement of Expenditure of the Bombay Municipality from 1865 to the close of the financial year 1918-19.

No. 23.—Contrasted statement of Income and Expenditure from the year 1865 to the financial year 1918-19.

I have the honour to be,
Sir,
Your most obedient servant,
D. ROBERTSON,
Acting Chief Accountant.

Appendix

IN

STATEMENT showing the Net Receipts during the Financial year 1918-19 from all sources as

Actuals for 1917-18.	PARTICULARS.	Details of Actuals.	Actuals for 1918-19.	Budget Estimate for 1918-19.
Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.
	Taxation Proper.			
	I—General Tax at 9½ per cent.—			
48,75,598 4 4	(1) From the Public	44,54,319 13 11		43,10,250 0 0
2,42,960 1 1	(2) „ Government	2,42,960 1 0		2,43,000 0 0
3,56,705 8 4	(3) „ Port Trust	13,12,119 12 9		4,52,000 0 0
	(4) „ C. I. Trust	6,77,675 13 7		5,67,600 0 0
	(5) „ Mills	5,31,973 9 6		4,34,000 0 0
54,75,263 13 9			72,19,049 2 9	60,06,850 0 0
	II—For Fire Tax at ¾ per cent.—			
1,92,458 10 6	(1) From the Public	1,75,822 5 3		1,70,100 0 0
9,590 8 5	(2) „ Government	9,590 8 6		9,500 0 0
14,080 7 8	(3) „ Port Trust	51,794 3 3		18,000 0 0
	(4) „ C. I. Trust	26,758 6 1		22,400 0 0
	(5) „ Mills	20,997 1 1		17,000 0 0
2,16,129 10 6			2,84,962 8 2	2,37,000 0 0
56,91,393 8 3			75,04,011 10 11	62,43,850 0 0
	III—Wheel Tax and Tolls—			
2,82,962 11 9	(1) Private Conveyances	3,05,807 0 0		2,72,000 0 0
2,81,638 10 0	(2) Public Conveyances	2,74,333 5 4		2,86,000 0 0
22,375 0 0	(3) Tolls	24,500 0 0		22,000 0 0
5,86,976 5 9			6,04,640 5 4	5,80,000 0 0
	IV—Town Duties—			
25,44,575 12 5	(1) Through Port Trust	24,14,098 4 6		25,20,000 0 0
13,37,980 0 10	(2) „ G. I. P. Railway	11,09,595 0 8		4,23,000 0 0
5,71,926 15 6	(3) „ B. B. & C. I. Railway ...	6,88,613 4 9		11,32,000 0 0
44,54,482 12 9			42,12,306 9 11	40,75,000 0 0
24,14,178 1 0	*Less*—Refunds		22,57,723 15 0	22,00,000 0 0
20,40,304 11 9			19,54,582 10 11	18,75,000 0 0
	V—Licenses—			
1,28,065 10 0	(1) Dangerous and Offensive Trades...	1,29,783 4 0		1,20,000 0 0
5,780 0 0	(2) Streets and Buildings—Licenses to Plumbers and Surveyors	6,415 0 0		7,000 0 0
25,094 9 8	(3) Land Conveyance Music, Licenses (issued by the Commissioner of Police)	17,141 7 2		12,000 0 0
1,58,940 3 8			1,53,339 11 2	1,39,000 0 0
1,43,750 0 0	VI—Liquor Licenses—Commuted payment from Government (Act V of 1878) ...		1,43,750 0 0	1,43,750 0 0
3,71,290 12 2	VII—Tobacco Duty—Net receipts from Government (Act IV of 1857) ...		3,86,009 2 5	3,57,250 0 0
89,92,655 9 7	Carried forward Rs. ...		1,07,46,333 8 9	93,38,850 0 0

No. 1.

COME.

contrasted with the Actuals for 1917-18, the Original Budget Estimate and the Revised Estimate.

Revised Estimate for 1918-19.	Compared with the Actuals for 1917-18.		Compared with the Original Estimate.		Compared with the Revised Estimate.	
	Increase.	Decrease.	More.	Less.	More.	Less.
Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
43,50,000						
2,43,000						
14,55,670						
5,74,000						
5,60,000						
71,82,670	17,43 785 5 0	.....	12,12,199 2 9	.....	36,379 2 9	.....
1,71 000						
9,600						
59,280						
21,400						
22,900						
2,85,180	68,832 13 8	.....	47,962 8 2	.....	.....	217 7 10
74,67,850	18,12,618 2 8	.....	12,60,161 10 11	.....	36,379 2 9	217 7 10
3,10,000						
2,95,000						
24,500						
6,29,500	17,663 15 7	.....	24,640 5 4	.....	.....	24,859 10 8
25,25,000						
12,00,000						
6,25,000						
43,50,000						
24,25,000						
19,25,000	.....	85,722 0 10	79,582 10 11	.....	29,582 10 11	.....
1,36,000						
7,000						
18,000						
1,55,000	.....	5,600 8 6	14,339 11 2	.....	.....	1,660 4 10
1,43,750	.....	.....	.....	.....	.....	.....
3,71,250	14,718 6 3	.....	28,759 2 5	.....	14,759 2 5	.....
1,06,92,250	18,45,000 8 6	91,322 9 4	14,07,483 8 9	.....	80,721 0 1	26,737 7 4

Appendix

I N

STATEMENT showing the Net Receipts during the Financial year 1918-19 from all sources as

Actuals for 1917-18.	PARTICULARS.	Details of Actuals.	Actuals for 1918-19.	Budget Estimate for 1918-19.
Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.
89,92,655 9 7	Brought over Rs. ...	.....	1,07,46,333 8 9	93,38,850 0 0
	Services Rendered.			
	VIII.—Halalkhore Tax—			
15,04,118 2 11	(1) On Rateable Value	17,30,132 12 9		15,60,000 0 0
1,09,004 11 6	(2) For Special Service	1,03,934 11 8		1 00,000 0 0
16,13,122 14 5			18,34,067 8 5	16,60,000 0 0
	IX—Water Tax and Other Miscellaneous			
	Water Works Revenue—			
11,86,796 2 1	(1) On Rateable Value	13,32,924 0 5		12,79,000 0 0
14,12,650 14 4	(2) By Measurement per 1,000 gallons	15,07,546 8 5		14,19,000 0 0
35,199 6 9	(3) Rent of Water Meters	34,263 8 7		32,000 0 0
42,539 13 10	(4) Compounded Tax	78,059 9 11		33,000 0 0
20,533 11 1	(5) Miscellaneous Receipts	24,809 10 1		12,000 0 0
26,97,720 0 1			29,7[illegible],602 5 5	27,75,000 0 0
43,10,842 14 6			48,11,669 13 10	44,35,000 0 0
	Returns from Property and Miscellaneous.			
	X—Market Receipts—			
1,99,791 15 0	(1) Stall Rents	2,07,691 9 0		2,00,000 0 0
55,703 5 0	(2) Squatters' Fees	61,012 10 0		54,000 0 0
1,03,600 0 0	(3) Fair Ground and Feeding Fees .	1,06,600 0 0		1,02,000 0 0
2,62,562 7 0	(4) Slaughter Fees	2,95,566 6 0		2,57,000 0 0
36,091 12 5	(5) Miscellaneous Receipts	36,580 11 3		39,000 0 0
6,57,749 7 5			7,07,451 4 3	6,52,000 0 0
	XI—Public Gardens—			
5,568 2 6	(1) Sale-proceeds of plants, flowers, &c.	6,343 15 0		5,500 0 0
.....	(2) Donations, Gifts, &c.	.....		.....
4,589 4 0	(3) Miscellaneous	5,062 4 6		4,500 0 0
10,157 6 6			11,406 3 6	10,000 0 0
55,589 1 8	XII—Tramway Rent		56,343 12 3	57,000 0 0
	XIII—Miscellaneous Fines and Penalties—			
40,039 2 9	(1) For offences against the Law ...	48,642 8 6		41,000 0 0
14,479 6 5	(2) Departmental Fines...	14,767 2 11		14,900 0 0
53 0 0	(3) Miscellaneous	1,148 12 11		100 0 0
54,571 9 2			64,558 8 4	56,000 0 0
7,78,067 8 9	Returns from Property and Miscellaneous, Carried forward Rs.		8,39,759 12 4	7,75,000 0 0
1,33,03,498 8 1	Taxation Proper—Total Carried forward		1,55,[illegible]8,003 6 7	1,37,73,856 0 0

No. 1—*continued.*

C O M E.

contrasted with the Actuals for 1917-18, the Original Budget Estimate and the Revised Estimate.

Revised Estimate for 1918-19.	Compared with the Actuals for 1917-18.		Compared with the Original Estimate.		Compared with the Revised Estimate.	
	Increase.	Decrease.	More.	Less.	More.	Less.
Rs. a. p	Rs. a. p	Rs. a. p	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.
1,06,92,350 0 0	18,45,000 8 6	91 322 9 4	14,07,483 8 9	.....	80,721 0 1	26,737 7 4
17,23,000 0 0						
1,00,000 0 0						
18,23,000 0 0	2,20,944 10 0	.....	1,74,067 8 5	.....	11,067 8 5	.....
13,40,000 0 0						
14,45,000 0 0						
52,000 0 0						
48,000 0 0						
20,000 0 0						
29,05,000 0 0	2,79,882 5 4	.....	2,02,602 5 5	.....	72,602 5 5	.....
47,28,000 0 0	5,00,826 15 4	.....	3,76,669 13 10	.....	83,669 13 10	.....
2,07,000 0 0						
55,000 0 0						
1,07,000 0 0						
2,99,000 0 0						
40,000 0 0						
7,08,000 0 0	49,701 12 10	.....	55,451 4 3	.....	.....	548 11 9
6,500 0 0						
.....						
5,500 0 0						
12,000 0 0	1,248 13 0	.....	1,406 3 6	.....	.....	593 12 6
57,000 0 0	754 10 7	.....	.....	656 3 9	.....	656 3 9
43,000 0 0						
16,700 0 0						
300 0 0						
60,000 0 0	9,986 15 2	.....	8,558 8 4	.....	4,558 8 4	.....
8,37,100 0 0	61,692 3 7	.....	65,416 0 1	656 3 9	4,558 8 4	1,798 12 0
1,54,20,550 0 0	23,45,827 7 10	91,322 9 4	17,84,153 6 7	.....	1,64,390 12 11	26,737 7 4

Appendix

IN

STATEMENT showing the Net Receipts during the Financial year 1918-19 from all sources as

Actuals for 1917-18.	PARTICULARS.	Details of Actuals.	Actuals for 1918-19.	Budget Estimate for 1918-19.
Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs.
1,33,03,498 8 1	Taxation Proper—Total Brought over Rs. ...	.....	1,55,58,003 6 7	1,37,73,850
7,78,067 8 9	Returns from Property and Miscellaneous Continued and Brought over Rs. ...		8,39,759 12 4	7,75,000
	XIV—Miscellaneous Receipts—			
7,319 10 7	(1) By Sale of Lands, Buildings, Plant and Machinery	18,981 8 8		15,000
	(2) By Street Improvement—			
35,887 13 1	(a) Sale of Set-forward Land ...	19,263 6 11		30,000
293 8 0	(b) Sale of Materials	5,819 9 9		5,000
7,834 0 0	(c) Recoveries for permission to build within the regular line of Street	8,281 8 0		10,000
27,407 0 0	(3) Ground Rent	95,438 2 0		35,000
.....	(4) Sale of Rights	98,343 0 0		.....
1,76,474 2 8	(5) Rent of Buildings and Lands ...	1,69,345 8 1		1,80,000
57,060 7 0	(6) Miscellaneous	47,636 4 3		45,000
3,11,776 9 4			4,63,114 15 8	3,20,000
	XV—Miscellaneous Fees—			
43,410 11 7	(1) Roads and Building Fees	57,668 9 6		46,000
68,237 6 0	(2) Health Department Fees	35,657 12 0		40,000
7,553 13 8	(3) Miscellaneous	7,803 9 6		29,000
1,19,201 15 3			1,01,129 15 0	1,15,000
7,386 4 1	XVI—Miscellaneous Unclaimed Dues ...		11,034 4 8	8,000
	XVII—Contribution from Municipal Servants			
44,322 11 11	towards Pension, &c., Fund		48,282 0 5	50,000
12,233 7 2	XVIII—Net Profit on Municipal Workshops ...		30,546 8 4	8,000
	XIX—Net Profit on Sale of Stores to			
2,315 14 10	Contractors		1,038 6 3	10,000
	XX—Sale Proceeds of Unserviceable Tools,			
10,412 5 0	Plant, &c.		16,707 6 0	8,000
12,85,716 12 4			15,11,663 4 8	12,94,000
	XXI—Interest and Profit on Investments of			
2,40,171 8 6	Surplus Loan and Other Balances ...		3,04,517 14 6	1,70,000
15,25,888 4 10			18,16,181 3 2	14,64,000
1,48,29,386 12 11	Total Income Rs. ...		1,73,74,184 9 9	1,52,37,850
	Net Increase Rs. ...			

D. ROBERTSON,

Acting Chief Accountant.

No. 1—*concluded.*

COME.

contrasted with the Actuals for 1917-18, the Original Budget Estimate and the Revised Estimate.

Revised Estimate for 1918-19.	Compared with the Actuals for 1917-18.		Compared with the Original Estimate.		Compared with the Revised Estimate.	
	Increase.	Decrease.	More.	Less.	More.	Less.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a p.
1,54,20,350 0 0	23,45,827 7 10	91,322 9 4	17,84,153 6 7	.....	1,64,390 13 11	26,737 7 4
8 37,100 0 0	61,692 3 7	.....	65,416 0 1	656 3 9	4,558 8 4	1,798 12 0
25,000 0 0						
6,000 0 0						
800 0 0						
6,000 0 0						
70,600 0 0						
60,000 0 0						
1,50,200 0 0						
40,000 0 0						
3,58,000 0 0	1,51,338 6 4	.....	1,43,114 15 8	.....	1,05,114 15 8	.....
55,000 0 0						
35,000 9 0						
10,000 0 0						
1,00,000 0 0	.....	18,072 0 3	.....	13,870 1 0	1,129 15 0	.....
8,000 0 0	3,698 0 7	.....	3,084 4 8	.....	3,084 4 8	.....
50,000 0 0	3,959 4 6	.....	.....	1,717 15 7	.....	1,717 15 7
8,000 0 0	13,313 1 2	.....	22,546 8 4	.....	22,546 8 4	.....
10,000 0 0	.....	1,277 8 7	.....	8,961 9 9	.....	8,961 9 9
13,000 0 0	6,295 1 8	.....	8,707 6 0	.....	3,707 6 0	.....
13,84,000 0 0	2,45,296 1 2	19,349 8 10	2,42,869 2 9	25,205 14 1	1,40,141 10 0	12,478 5 4
2,47,500 0 0	64,346 6 0	.....	1,34,517 14 6	.....	57,017 14 6	.....
16,31,500 0 0	3,09,642 7 2	19,349 8 10	3,77,387 1 3	25,205 14 1	1,97,159 8 6	12,478 5 4
1,70,51,850 0 0	26,55,469 15 0	1,10,672 2 2	21,61,540 7 10	20,205 14 1	3,61,550 6 5	39,215 12 8
	—1,10,672 2 2		—25,205 14 1		—39,215 12 8	
	25,44,797 12 10		21,36,334 9 9		3,22,334 9 9	

P. W. MONIE,
Municipal Commissioner.

Appendix

EXPEN

STATEMENT showing the Actuals as compared with the Final Sanctioned Grants for

Actuals for 1917-18.	PARTICULARS.	Details of Actuals for 1918-19.	Actuals for 1918-19.	Final Grants sanctioned for Expenditure during 1918-19.
Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.
	I—General Superintendence—			
88,597 10 0	A.—Corporation and Standing Committee	88,326 9 0		96,890 3 10
1,57,049 8 1	B.—Municipal Commissioner's Personal and General Office	1,70,193 9 6		2,02,071 4 1
1,962 13 11	Do. do. New Works...	495 8 0		7,393 8 2
1,04,485 2 7	C.—Audit and Accounts ...	1,19,707 11 3		1,21,083 10 6
			‡3,78,723 5 9	4,27,438 10 7
3,52,095 2 7				
	II—Assessment and Collection—			
90 906 9 11	A.—Town Duty Refund Branch	73 255 4 8		77,865 10 6
.....	Do. do. New Works ...	.....		.....
2,43,033 1 3	B.—Property and Wheel Tax.	2,56,234 1 7		2,66,804 13 7
.....	Do. do. New Works ..	93 8 1		3,529 0 0
1,70,827 9 0	C.—Town Duty Collections ...	1,69,824 2 8		1,98,276 15 4
443 0 0	D.—Tolls	442 0 0		450 0 0
28,315 15 6	E.—Licensing Establishment..	29,217 15 0		31,304 14 7
.....	Do. do. New Works ...	.....		.....
5,33,526 3 8			†5,29,127 0 0	5,78,231 6 0
2,20,059 7 1	III—Fire Brigade	*2,57,728 11 0		2,90,106 13 2
2,161 4 3	Do. New Works ...	214 14 6		990 10 6
2,22,211 11 4			2,57,943 9 6	2,91,097 7 8
77,300 7 5	IV—Public Gardens	85,290 7 6		1,30,127 6 4
4,254 14 6	Do. New Works ...	7,794 12 2		14,612 8 5
81,555 5 11			93,085 3 8	1,44,739 14 9
	V—Public Works (Engineer's) Department—			
95,416 1 7	General Supervision and Miscellaneous Duties ...	94,295 11 6		96,384 6 4
.....	Do. do. New Works ...	.....		.....
	VI—Mechanical Branch—			
3,37,086 11 0	A.—Pumping and Air Compressor Stations and Flood Gates	4,32,376 8 9		4,87,198 10 3
.....	B.—Supervision of Factories, Workshops and Work Places	1,996 4 7		4,849 0 0
7,301 2 5	New Works—Mechanical Branch	.....		7,421 13 7
.....	Workshops—New Works ..	.....		.....
1,02,364 4 2	VII—Sanitary—Disposal of Town Sweepings	89,529 11 9		1,02,689 6 0
.....	Do. —New Works ...	.....		.....
2,68,519 8 9	VIII—Miscellaneous Drainage and Sluices	3,05,820 15 2		3,69,195 13 0
72,942 7 11	Do. —New Works ...	1,03,864 4 4		1,96,605 1 11
8,73,630 3 10	Engineer's Department.	10,27,883 8 1		12,64,344 3 1
11,89,388 7 6	Carried forward...Rs.	.....	12,58,879 2 11	14,41,507 7 0

‡ Of this Rs. 47,340-6-9 are charged to Water Works Account.

† Of this Rs. 76,898-4-6 are charged to Water Works Account.

* Includes Rs. 34,748-10-11 on account of Debt and Interest.

No. 2.

DITURE.

1918-19 and the Actuals for the preceding year.

Final Grants compared with the Actuals.			Compared with the Actuals for 1917-18.	
Balances unexpended.	Required to be renewed in 1919-20.	Net savings.	Increase.	Decrease.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
8,563 10 10	6,476 10 4	2,687 0 6	.....	271 1 0
31,877 10 7	26,229 4 5	5,648 6 2	13,144 1 5	.....
6,898 0 2	6,777 8 0	120 8 2	.....	1,467 5 11
1,375 15 3	39 3 5	1,336 11 10	15,222 8 8	.....
48,715 4 10	39,522 10 2	9,193 10 8	28,366 10 1	1,738 6 11
4,610 5 10	603 6 11	4,006 14 11	.....	17,651 5 8
.....	.....	.....	.....	.....
10,570 12 0	8,388 10 10	2,182 1 2	13,201 0 4	.....
3,435 7 11	2,744 0 0	691 7 11	93 8 1	.....
28,452 12 8	4,181 4 0	24,271 8 8	.....	1,003 6 4
8 0 0	.....	8 0 0	.....	1 0 0
2,026 15 7	1,783 0 0	243 15 7	961 15 6	.....
.....	.....	.....	.....	.....
49,104 6 0	17,700 5 9	31,404 0 3	14,256 7 11	18,655 11 7
32,378 2 2	30,564 4 5	1,813 13 9	37,678 3 11	.....
775 12 0	775 10 6	0 1 6	.....	1,946 5 9
33,153 14 2	31,339 14 11	1,813 15 3	37,678 3 11	1,946 5 9
44,836 14 10	38,654 0 0	6,182 14 10	7,990 0 1	.....
6,817 12 3	5,172 0 0	1,645 12 3	3,539 13 8	.....
51,654 11 1	43,826 0 0	7,828 11 1	11,529 13 9	.....
2,088 10 10	1,603 0 0	485 10 10	.....	1,120 6 1
.....	.....	.....	.....	.....
54,822 1 6	44,863 0 0	9,959 1 6	1,05,289 13 9	.....
2,853 11 5	900 0 0	1,952 11 5	1,996 4 7	.....
7,421 13 7	7,421 13 7	.....	.....	7,301 2 5
.....	.....	.....	.....	.....
13,159 10 3	3,588 0 0	9,571 10 3	.....	12,834 8 5
.....	.....	.....	.....	.....
63,374 13 10	46,956 6 0	16,418 7 10	37,301 6 5	.....
92,740 13 7	70,596 0 0	22,144 13 7	30,921 12 5	.....
2,36,460 11 0	1,75,928 3 7	60,532 7 5	1,75,509 5 2	21,256 0 11
1,82,628 4 1	1,32,388 14 10	50,239 5 3	91,831 3 8	22,340 8 3

Appendix

Actuals for 1917-18.			Particulars.	Details of Actuals for 1918-19.			Actuals for 1918-19.			Final Grants sanctioned for Expenditure during 1918-19.		
Rs.	a.	p.		Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
11,89,388	7	6	Brought forward ...	.....			12,58,879	2	11	14,41,507	7	0
8,73,630	3	10	Engineer's Dept. brought over ...	10,27,883	8	1	.....			12,64,344	3	1
			IX—Streets and Buildings—									
2,28,786	7	4	A.—Inspection and Supervision	2,55,415	1	4				2,74,248	2	3
4,95,430	4	0	B.—Public Lighting	4,91,647	13	8				5,38,410	13	9
1,25,536	0	10	C.—Road Watering	1,48,113	1	10				1,65,887	0	0
1,20,678	14	2	D.—Roads and Footpaths ...	11,06,477	13	3				13,33,563	13	2
6,60,528	6	7										
1,82,156	5	3	E.—Street Improvements ...	1,69,108	2	9				1,98,398	14	5
49,358	3	1	F.—Cleaning, Lighting and Repairing, Port Trust Wharves and Roads ...	2,84,174	0	0				2,84,174	0	0
18,62,474	9	3		24,55,186	0	10				27,84,682	11	7
24,455	2	2	New Works	36,343	8	5				80,274	15	3
4,31,265	8	9	X—Water Works	5,98,302	13	8				5,32,503	6	9
35,554	5	3	Do. New Works... ...	34,267	14	5				66,192	4	6
32,27,379	13	3	Total Engineer's Department ...				39,46,953	13	5	47,27,997	9	2
			XI—Public Health—									
1,56,274	8	11	A—Supervision	1,57,122	6	6				1,60,678	2	0
13,06,324	3	5	B—Conservancy	15,12,820	2	8				16,37,912	8	9
5,24,778	9	10	C.—Halalkhore Branch ...	5,59,999	7	5				6,03,763	4	8
1,02,040	5	6	D.—Registration of Births and Deaths	1,15,063	13	7				1,21,762	14	6
11,639	0	8	E.—Cemeteries	15,266	11	6				22,099	9	9
16,056	6	3	F—Laboratory	17,617	10	10				22,596	9	4
19,692	3	1	G—Mahaluxmi Dhobi wada ..	16,082	10	2				18,287	1	9
6,748	4	1	H.—Milch Cattle Stables and Rooms	1,203	6	1				2,238	14	7
3,805	2	6	I.—Supervision of City Milk Supply	4,965	1	0				4,578	8	0
18,797	8	11	J.—Dispensaries	20,037	5	8				20,559	8	0
383	7	4	K.—Dharamsalas	223	6	10				1,917	2	9
61,440	7	9	L.—Infectious Diseases ...	1,94,937	6	10				2,09,436	1	0
33,319	8	3	M.—Vaccination	35,209	9	1				37,844	11	5
46,218	6	8	N.—Malaria	32,343	8	1				35,372	7	8
1,32,160	6	1	O.—Plague	1,26,576	4	4				1,43,154	10	8
1,391	9	9	P.—Destruction of Dogs ...	1,504	1	10				1,984	1	1
24,41,070	3	0	Total ...	28,10,103	0	5				30,44,156	3	11
40,220	1	10	Health Department—New Works...	60,540	0	7				1,37,699	12	5
24,81,290	4	10	Total—Health Department ...				28,70,643	1	0	31,81,856	0	4
2,43,922	13	10	XII—Markets and Slaughter Houses	3,70,063	11	11				4,11,328	3	6
3,808	2	5	Do. New Works ...	13,470	13	0				70,031	5	4
44,085	4	9	XIII—General Stores...	46,820	11	8				52,011	2	6
2,241	3	0	Do. New Works ...	.....						.....		
6,44,000	0	0	XV—Education—A. Primary ...	8,79,707	10	2				8,86,610	8	2
87,595	2	1	Do. B. Secondary	47,500	0	0				47,500	0	0
82	12	10	Do. New Works	.....						.....		
4,46,570	0	0	XVI—Hospitals	4,89,328	0	0				4,92,000	0	0
			XVII—Pensions—									
1,75,959	12	11	Pensions, Gratuities and Compassionate Allowances ...	1,64,955	3	3				1,72,970	3	1
16,48,265	3	10	Miscellaneous Carried over ...	20,11,846	2	0	.....			21,32,451	6	7
68,98,058	9	7	Carried over ...	.....			80,76,476	1	4	93,51,361	0	6

No. 2—*continued.*

Final Grants compared with the Actuals.			Compared with the Actuals for 1917-18.	
Balances unexpended.	Required to be renewed in 1919-20.	Net savings.	Increase.	Decrease.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1,82,628 4 1	1,32,388 14 10	50,239 5 3	91,831 3 8	22,340 8 3
2,36,460 11 0	1,75,928 3 7	60,532 7 5	1,75,509 5 2	21,256 0 11
18,833 0 11	7,177 8 0	11,655 8 11	26,628 10 0	.....
46,563 0 1	33,228 0 0	13,335 0 1	.....	3,552 6 4
17,773 14 2	7,962 0 0	9,811 14 2	22,577 1 0	.....
2,17,085 15 11	1,49,806 0 0	67,279 15 11	3,25,270 8 6	.....
29,290 11 8	28,402 0 0	888 11 8	.....	13,048 2 6
.....	.....	.....	2,34,815 12 11	.....
3,29,546 10 9	2,26,575 8 0	1,02,971 2 9	6,09,292 0 5	16,630 8 10
43,931 6 10	41,729 0 0	2,202 6 10	11,888 6 3	.....
1,39,200 9 1	1,07,740 0 0	31,460 9 1	.....	37,962 11 1
31,904 6 1	30,207 0 0	1,697 6 1	.....	1,266 6 10
7,81,043 11 9	5,82,179 1. 7	1,98,864 0 2	7,96,689 11 10	77,115 11 8
3,555 11 6	1,303 0 0	2,252 11 6	847 13 7	.....
1,25,092 6 1	96,473 1 10	28,619 4 3	2,06,495 15 3	.....
43,753 13 3	36,758 7 7	6,995 5 8	35,220 13 7	.....
6,699 0 11	1,882 0 0	4,817 0 11	13,623 8 1	.....
6,832 14 3	4,759 3 5	2,073 10 10	3,627 10 10	.....
4,978 14 6	4,863 0 0	115 14 6	1,561 4 7	.....
2,204 7 7	1,736 0 0	468 7 7	.....	3,609 8 11
1,035 8 6	.....	1,035 8 6	.....	5,544 14 0
513 7 0	.....	513 7 0	259 14 6	.....
502 2 4	471 0 0	31 2 4	1,239 12 9	.....
1,693 11 11	1,652 0 0	41 11 11	.....	160 0 6
14,498 10 2	8,340 0 8	6,158 9 6	1,33,496 15 1	.....
2,635 2 4	1,471 0 0	1,164 2 4	1,890 0 10	.....
3,028 15 7	206 0 0	2,822 15 7	.....	13,874 14 7
16,648 6 4	4,666 0 0	11,982 6 4	.....	5,654 1 9
379 15 3	319 0 0	60 15 3	213 8 1	.....
2,34,053 3 6	1,64,899 13 6	69,153 6 0	3,97,876 5 2	28,813 7 9
77,159 11 10	77,072 6 0	87 5 10	20,319 14 9	.....
3,11,212 15 4	2,41,972 3 6	69,240 11 10	4,18,196 5 11	28,813 7 9
41,264 7 7	22,269 0 0	18,995 7 7	1,26,140 14 1	.....
56,560 8 4	56,432 0 0	128 8 4	9,662 10 7	.....
5,190 6 10	3,878 0 0	1,312 6 10	2,735 6 11	.....
.....	.....	.....	.....	2,241 3 0
6,902 14 0	4,252 15 10	2,649 14 2	2,35,707 10 2	.....
.....	.....	.....	.....	40,095 2 1
.....	.....	.....	.....	83 12 10
2,672 0 0	.....	2,672 0 0	42,758 0 0	.....
8,014 15 10	8,014 15 10	.....	.....	11,004 9 8
1,20,605 4 7	94,846 15 8	25,758 4 11	4,17,004 9 9	53,423 11 7
12,74,884 15 2	9,56,540 13 11	3,18,344 1 3	13 06,717 3 5	1,28,299 11 8

Appendix

Actuals for 1917-18.	PARTICULARS.	Details of Actuals for 1918-19.	Actuals for 1918-19.	Final Grants sanctioned for Expenditure during 1918-19.
Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.
68,98,058 9 7	Brought forward ...	.....	80,76,476 1 4	93,51,361 0 6
16,48,265 3 10	Miscellaneous brought forward ...	20,11,846 2 0		21,32,451 6 7
	XVIII—Extraordinary Allowance—			
72 425 4 3	I.—War Allowance	4,27,083 8 0		4,54,084 0 0
1,83,798 6 11	II.—Grain Compensation ...	1,88,669 1 6		1,95,173 0 0
26,215 1 1	III—Local Allowance	16,900 4 8		22,200 0 0
10,98,112 14 3	XIX—Contribution to City Improvement Trust	11,52,687 2 5		11,52,687 2 5
10,000 0 0	XX—Fire and Accident Insurance Fund	10,000 0 0		10,000 0 0
25,000 0 0	XXI—Surveys of Buildings and Lands	25,000 0 0		25,000 0 0
	XXII - Special and Miscellaneous.—			
5,351 1 2	I—Discretional Contingencies	6,387 10 1		7,400 0 0
10,000 0 0	II—Auditors' Allowance ...	10,000 0 0		10,000 0 0
50,000 0 0	III—Contribution towards the Building to be erected at Apollo Bunder to commemorate the visit of His Majesty the King-Emperor of India.	25,000 0 0		25,000 0 0
.. ..	IV—Compensation and damages awarded	2,500 0 0		2,500 0 0
.....	V—Presentation of Addreses...	2,263 6 0		3,700 0 0
41,86,064 7 6	Municipal Debt	44,30,259 13 1		47,15,708 15 9
.....	Depreciation in Government Paper held in Surplus Fund.	6,34,255 14 0		6,52,669 14 0
41,398 13 7	Investments of sale proceeds of Municipal land in the Municipal Land and Buildings Fund	7,319 10 7		7,319 10 7
2,644 5 9	Portion of the difference between the book value and the sale proceeds of unserviceable open parts of inferential and other meters written off ..	.....		.....
4,154 4 1	Increased rates paid to Contractors in respect of certain articles, &c. ...	.....		.....
73,63,332 14 5			89,50,172 7 11	94,15,894 1 4
1,42,61,391 8 0	Total Rs. ...		1,70,26,648 9 3	1,87,67,255 1 10

D. ROBERTSON,

Acting Chief Accountant.

No. 2—*concluded.*

Final Grants compared with Actuals.			Compared with Actuals for 1917-18.	
Balances unexpended.	Required to be renewed in 1919-20.	Net savings.	Increase.	Decrease.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
12,74,884 15 2	9,56,540 13 11	3,18,344 1 3	13,06,717 3 5	1,28,299 11 8
1,20,605 4 7	94,846 15 8	25,758 4 11	4,17,004 9 9	53,423 11 7
27,000 8 0	26,000 0 0	1,000 8 0	3,54,658 3 9	.....
6,503 14 6	2,500 0 0	4,003 14 6	4,870 10 7	.....
5,299 11 9	500 0 0	4,799 11 9	.....	9,314 12 10
.....	.....	.....	54,574 4 2	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
1,012 5 11	500 0 0	512 5 11	1,033 8 11	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	25,000 0 0
.....	.....	.....	2,500 0 0	.....
1,436 10 0	1,436 10 0	.....	2,263 6 0	.....
2,85,449 2 8	2,84,748 9 8	700 9 0	2,44,195 5 7	.....
18,414 0 0	.....	18,414 0 0	6,34,255 14 0	.....
.....	.....	.....	.....	34,079 3 0
.....	.....	.....	.....	2,544 5 9
.....	.....	.....	.....	4,154 4 1
4,65,721 9 5	4,10,532 3 4	55,189 6 1	17,15,355 14 9	1,28,516 5 3
17,40,606 8 7	13,67,073 1 3	3,73,533 7 4	30,22,073 2 2	2,56,816 0 11

P. W. MONIE,
Municipal Commissioner.

Appendix No. 3.

Revenue Account for the year ended 31st March 1919.

	Rs. a. p.	Rs. a. p.
Receipts as per Appendix No. 1		1,73,74,184 9 9
Payments as per Appendix No. 2		1,70,26,648 9 3
Excess Receipts over Payments		3,47,536 0 6
Less—		
Increase in outstanding liabilities.		
(1) On account of grants renewed	2,49,874 9 10	
(2) In payment to City Improvement Trust	3,67,112 10 11	
		6,16,987 4 9
Net Deficit for the year		2,69,451 4 3
Surplus Revenue Fund as at 1st April 1918		48,91,895 15 11
Excess of Expenditure over Income as above		2,69,451 4 3
Surplus Revenue Fund as at 31st March 1919 as per Appendix No. 5		46,22,444 11 8 *

*This includes Rs. 1,00,000 being minimum required by law and Rs. 6,86,961-3-4 being Reserve Stock Balances as at 31st March 1919.

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

Appendix No. 4.

Statement of Special Funds for 1918-19.

Municipal Fire and Accident Insurance Fund. Year ended 31st March 1919.

	Dr. Rs. a. p.	*Cr.* Rs. a. p.
Balance on 1st April 1918	.....	2,51,447 1 3
Municipal Contribution for year	.....	10,000 0 0
Interest realized	.....	9,021 2 11
Cost of replacing 2 teakwood tables and 3 chairs burnt by fire at Mahim Stables in 1918	159 10 4	.....
Balance on 31st March 1919 as per Balance Sheet, Appendix No. 5 ...	2,70,308 9 10	.....
Total Rs. ...	2,70,468 4 2	2,70,468 4 2

Worn-out Water Mains Renewal Fund. Year ended 31st March 1919.

	Rs. a. p.	Rs. a. p.
Balance on 1st April 1918	.....	6,16,854 6 2
Interest realized	.....	21,863 4 0
Balance on 31st March 1919 as per Balance Sheet, Appendix No. 5	6,38,717 10 2	.....
Total Rs. ..	6,38,717 10 2	6,38,717 10 2

Net Premia Fund. Year ended 31st March 1919.

	Rs. a. p.	Rs. a. p.
Balance on 1st April 1918	.....	2,77,178 10 5
Interest realized	.....	10,619 11 0
Extra Interest realizations on Sinking Fund Investments	.....	1,04,251 14 8
Sale of water-marked paper	.....	119 8 0
Purchase of water-marked Paper	733 15 0	.....
Raising 12 months' bill loan of 30 Lakhs	65 3 0 0	.....
Balance on 31st March 1919 as per Balance Sheet, Appendix No. 5.	* 3,84,942 13 1	.....
Total Rs. ...	3,92,179 12 1	3,92,179 12 1

Municipal Land and Buildings Fund. Balance Sheet as at 31st March 1919.

	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.
Fund on 1st April 1919...		3,59,797 14 6		Land purchased and buildings erected up to 31st March 1918 at cost ...	10,680 14 5		
Transfer of the amount of moneys received on account of sale of land other than set-forward land during the year (1917-18).	7,319 10 7			Additions during the year— For the acquisition of plot of land at Masjid Bunder Road and Narayan Dhuru Street. Rs. 1,343 For acquisition of land at Naigam Tank ... 11,115	12,458 0 0		
Interest realized	12,356 15 0					23,138 14 5	
		19,676 9 7		Investments:— 3½ per cent. Government Promissory Notes of nominal value Rs. 3,59,600 ...	3,56,314 0 0		
				Cash in Bank	21 9 8		
Fund on 31st March 1919	.....		3,79,474 8 1			3,56,335 9 8	3,79,474 8 1

* Of this Rs. 1,63,611-1-8 belong to the Water Works Account.

D. ROBERTSON,
Acting Chief Accountant

P. W. MONIE,
Municipal Commissioner.

Appendix

REVENUE ACCOUNT BALANCE

Liabilities.	Rs. a. p.	Rs. a. p.
Debts—		
Due on Cheques payable	2,72,857 13 4	
,, Stores purchased, Outstanding Accounts	96,078 12 1	
,, Outstanding Charges for 1918-19 and previous years	13,67,073 1 3	
City Improvement Trust—		
Contribution due to them from Revenue for 1918-1919	15,19,799 13 4	
Deposits in Cash and Paper from Contractors and private parties	18,55,622 12 10	
Government of Bombay—		
Taxes, &c.	7,215 6 9	
Bank of Bombay on account of Contractors' securities held under objection	1,200 0 0	
		51,19,847 11 7
Trust Funds—		
Deposit held from private parties on account of public monuments—		
Maintenance of Sir Mangaldass Nathoobhoy's clock	500 0 0	
Do. Ranade Memorial	1,200 0 0	
Do. J. N. Tata Memorial	1,200 0 0	
Do. Charitable Dispensary at Kamatipura, opened by Rao Bahadur Ellapa Balaram	12,500 0 0	
Do. Charitable Dispensary at Kamatipura, opened in the name of the late Mr. Rajanna Jalooji	10,700 0 0	
Do. Mr. Casamalli Jairajbhoy Peerbhoy's fountain at the junction of Hornby and Palton Roads	5,000 0 0	
Do. N. M. Petit's Memorial	3,000 0 0	
Do. Sir D. M. Petit's Memorial	2,000 0 0	
		43,100 0 0
Suspense Accounts—		
Profit on Sale of Stores	1,070 10 10	
Stock adjustment account	5,037 15 0	
Supervision charges on stores sold	142 15 7	
Loan Works Establishment	17,869 15 8	
		24,121 9 1
Contribution from Government towards the cost of Primary School Buildings and their sites		18,242 6 0
Special Funds as at 31st March 1919—		
Fire and Accident Insurance Fund	2,70,308 9 10	
Net Premia Fund	3,84,942 13 1	
Worn-out Water Mains Renewal Fund	6,28,717 10 2	
		12,93,969 1 1
Carried forward Rs.		64,99,280 11 9

No. 5.

SHEET AS AT 31st MARCH 1919.

Assets.	Rs. a. p.	Rs. a. p.
Cash in Office and in Bank...		5,22,295 8 5
Debts—		
Due for stores sold		15,687 8 7
Stock—		
Stock	5,75,906 6 7	
Water Works Imprest	5,344 7 7	
Executive Engineer's General...	1,076 11 0	
Line Suspense Account...	1,02,061 11 4	
Surplus and Obsolete Stores	2,571 14 10	
		6,86,961 3 4
Plant and Machinery		86,001 0 0
Advances Recoverable—		
To Municipal Officers, &c.	40,505 7 2	
„ Miscellaneous Advances...	2,50,986 9 4	
„ Private and Departmental Works including Workshops	1,79,780 7 3	
„ Printing and Stamping, Building and Repair Certificates Forms	131 9 4	
„ Contractors	389 6 2	
New Works to be subsequently provided for under a New Loan to be raised as per *Appendix No.* 14	5,99,213 3 10	
War Measures—Rent Relief	1,852 10 11	
Do. Relief to the Poor. (Municipal Grain Shops)	12,050 3 8	
Interest including Income Tax paid in advance on the 12 months' bill Loan of Rs. 30 Lakhs borrowed from the Bank of Bombay to be met from the provision for interest made in 1919-20	1,67,343 12 0	
		12,52,253 5 8
Deposits in paper with Bank of Bombay—		
On Contractors' Account	3,33,100 0 0	
Public Monuments Account	43,100 0 0	3,76,200 0 0
Carried forward Rs. ...		99,39,398 11 0

Appendix

REVENUE ACCOUNT BALANCE

	Rs. a. p.	Rs. a. p.
Brought over Rs. ...		64,99,280 11 9
Surplus Revenue Fund as per Appendix No. 3		46,22,444 11
		1,11,21,725 7 5

D. ROBERTSON,
Acting Chief Accountant.

No. 5—*concluded.*

SHEET AS AT 31st MARCH 1919.

			Brought over Rs.	Rs. a. p.	Rs. a. p. 29,39,398 11 0
Investments—					
Special Funds.	Face Value.	Actual cost.	Deposits in Cash and Fixed.		
	Rs. a. p.	Rs. a. p.	Rs. a. p.		
Municipal Fire and Accident Insurance Fund—					
5½ per cent. Indian War Bonds, 1928.	10,000 0 0	10,100 0 0			
3½ per cent. Government Paper.	2,64,200 0 0	2,60,068 2 0			
	2,74,200 0 0	2,70,168 2 0	140 7 10	2,70,308 9 10	
Net Premia, &c., on different Municipal Loans, 3½ per cent. Government Paper	4,34,400 0 0	3,84,858 10 0			
	4,34,400 0 0	3,84,858 10 0	84 3 1	3,84,942 13 1	
Worn-out Water Mains Renewal Fund—					
3½ per cent. Government Paper.	6,49,400 0 0	6,38,679 7 0			
	6,49,400 0 0	6,38,679 7 0	38 3 2	6,38,717 10 2	*12,93,969 1 1
Surplus Revenue Fund.	Face Value.	Actual Cost.	Deposits:—Cash Current Account and Fixed Deposits.		
4 per cent. Municipal Debentures.	2,45,000 0 0	2,45,000 0 0			
Government Treasury Bills ...	7,00,000 0 0	6,82,937 8 0			
4 per cent. Bombay Improvement Trust Bonds.	2,13,500 0 0	2,13,520 0 0			
4 per cent Improvement Trust Sterling Bonds for £25,000.	3,75,000 0 0	3,75,000 0 0			
3½ per cent. Government Paper.	18,39,300 0 0	12,69,105 0 0			
3 " " " "	900 0 0	513 0 0			
5½ per cent. Indian War Bonds of 1920, 1922 and 1923.	2,12,400 0 0	2,11,650 0 0			
5 per cent. Indian War Loan, 1929-47.	17,600 0 0	16,720 0 0			
	36,03,700 0 0	30,14,445 8 0	+35,93,129 6 0	=66,07,574 14 0	66,07,574 14 0
Scrip Receipt in respect of Bearer Bonds of the First Indian War Loan, purchased on behalf of Municipal employés					2,80,782 13 4
					1,11,21,725 7 5

* For Face, Purchase and Market values of each kind of securities held in the Special Funds, please see Appendix No. 5A, attached.

P. W. MONIE,
Municipal Commissioner.

Appendix No. 5A.

Comparison of Face, Purchase and Market Values at 31st March 1919 of the different securities held in the Special Funds.

Name of Fund.	Particulars of Securities.	Face value.	Purchase rate.	Actual cost at Purchase rate.	Estimated Market rate.	Value at Market rate.
		Rs.		Rs. a. p.		Rs. a. p.
Municipal Fire and Accident Insurance Fund.	3½ per cent. Government Paper...	2,30,200	Par	2,20,200 0 0		
	Do. do. ...	500	105 5/16 per cent.	526 9 0		
	Do. do. ...	6,000	103¾ „	6,225 0 0		
	Do. do. ...	500	101 „	505 0 0		
	Do. do. ...	6,500	98 1/16 „	6,414 11 0		
	Do. do. ...	10,000	98½ „	9,850 0 0	70 %	1,84,940 0 0
	Do. do. ..	500	98⅜ „	491 14 0		
	Do. do. ...	3,000	96⅝ „	2,898 12 0		
	Do. do. ...	1,000	96⅜ „	963 12 0		
	Do. do. ...	3,000	96¼ „	2,887 8 0		
	Do. do. ...	500	96 „	480 0 0		
	Do. do. ...	12,500	69 „	8,625 0 0		
	5½ per cent. 2nd Indian War Bonds, 1928	10,000	101 „	10,100 0 0	101¼	10,175 0 0
		2,74,200		2,70,168 2 0		1,95,115 0 0
Worn-out Water Mains Renewal Fund.	3½ per cent. Government Paper.	30,500	103¾ per cent.	31,643 12 0		
	Do. do. ...	5,02,000	Par	5,02,000 0 0		
	Do. do. ..	43,500	98 11/16 per cent.	42,929 1 0		
	Do. do. ...	7,000	98⅜ „	6,886 4 0	70%	4,54,580 0 0
	Do. do. ..	5,000	96⅛ „	4,831 4 0		
	Do. do. ...	28,000	96 3/16 „	26,932 8 0		
	Do. do. ...	1,500	96⅜ „	1,445 10 0		
	Do. do. ..	31,900	69 „	22,011 0 0		
		6,49,400		6,38,679 7 0		4,54,580 0 0
	Carried over ...	9,23,600		9,08,847 9 0		6,49,695 0 0

Appendix No. 5A—*concluded.*

Name of Fund.	Particulars of Securities.	Face value.	Purchase rate.	Actual cost at Purchase rate.	Estimated Market rate.	Value at Market rate.
		Rs.		Rs. a. p.		Rs. a. p.
	Brought forward ...	9,23,600		9,08,847 9 0		6,49,695 0 0
Net Premia, &c., on different Municipal Loans.	3½ per cent. Government Paper.	500	103¾ per cent.	518 12 0		
	Do. do. ...	5,000	96⅛ „	4,831 4 0		
	Do. do. ...	25,000	96⅝ „	22,166 4 0	70%	3,04,080 0 0
	Do. do. ...	3,500	96½ „	3,364 6 0		
	Do. do. ...	2,46,200	Par	2,46,200 0 0		
	Do. do. ...	1,56,200		1,07,778 0 0		
		4,34,400		3,84,858 10 0		3,04,080 0 0
Municipal Lands and Buildings Fund.	3½ per cent. Government Paper..	3,49,000	Par	3,49,000 0 0	70%	2,51,720 0 0
	Do. do. ...	10,600	69 per cent.	7,314 0 0		
		3 59,600		3,56,314 0 0		2,51,720 0 0
	Grand Total ..	17,17,600		16,50,020 3 0		12,05,495 0 0

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

Appendix

CAPITAL FUND BALANCE

	Rs. a. p.	Rs. a. p.	Rs. a. p.
Loans Outstanding :—			
Due to Government		21,08,638 11 9	
Due to the Public: –			
Rs. 26,91,000 Drainage Loan of 1878	52,500 0 0		
44 Lakhs Sanitary Works Loan of 1885-86	37,39,000 0 0		
7 Lakhs Sanitary Works Loan of 1888	7,00,000 0 0		
147 Lakhs Tansa Water Works Loan	1,47,00,000 0 0		
12 Lakhs Drainage and Water Works Loan	12,00,000 0 0		
Rs. 10,08,500 Miscellaneous Works Loan	10,08,500 0 0		
Rs. 2,48,000 Agripada House Sullage Water Connections Loan	2,48,000 0 0		
35 Lakhs various Sanitary Works Loan	35,00,000 0 0		
8 Lakhs Municipal Building Loan	8,00,000 0 0		
4½ Lakhs Fire Brigade Quarters and Stations Loan	4,50,000 0 0		
42 Lakhs Loan for repayment of Balance of Government Consolidated Loan	42,00,000 0 0		
23¼ Lakhs Drainage and other Works Loan	23,25,000 0 0		
15¾ Lakhs for the construction of Sewerage, Wari Bunder, &c., Roads, Burial Ground and certain Water Works	15,75,000 0 0		
25 Lakhs Loan for Sewerage, Water and other Sanitary Works.	25,00,000 0 0		
Loan of Rs. 20 Lakhs for Plague charges	20,00,000 0 0		
19¼ Lakhs Loan for Sewerage, Roads and other Sanitary Works	19,25,000 0 0		
24¾ Lakhs Loan for Sewerage and Water Works	24,75,000 0 0		
12¾ Lakhs Loan for certain Water Works of 1904-05	12,75,000 0 0		
2nd 24¾ Lakhs Loan for certain Sewerage Works	24,75,000 0 0		
13½ Lakhs Loan for the construction of Quarters for Halalkhores and Biggaries	13,50,000 0 0		
15 Lakhs Loan for Street Improvements	15,00,000 0 0		
30 Lakhs Loan for the acquisition of sites for the construction of various overbridges in the City	30,00,000 0 0		
55 Lakhs Loan for Miscellaneous Works	55,00,000 0 0		
70 Lakhs Loan for the Reduplication of Tansa Main and other Auxiliary Works	70,00,000 0 0		
20 Lakhs Loan for Street Improvements	20,00,000 0 0		
43 Lakhs Loan for Drainage, Water, Roads and Miscellaneous Works	43,00,000 0 0		
12 Months' bill, Loan of 30 Lakhs borrowed from the Bank of Bombay	30,00,000 0 0		
		7,47,98,000 0 0	7,69,06,638 11 9
Carried forward Rs. ...			7,69,06,638 11 9

No. 6.

SHEET AS AT 31ST MARCH 1919.

Block Account.—			
Property and Assets at original cost as per Appendix No. 8			8,34,99,572 5 5
Unbooked Property.—			
Provisional figure as per valuation of 1884 pending revaluation now in progress			45,37,835 11 11
Land Transferred.—			
Bombay Improvement Trust			17,15,289 5 11
Municipal Lands and Buildings Fund:—	Rs. a. p.		
Land purchased and buildings erected upto 31st March 1918 at cost.	10, 80 14 5		
Do do. during the year	12 458 0 0	23,138 14 5	
Investments.—			
3½% Government Promissory Notes Nominal value of Rs. 3,59,600...	3,56,314 0 0		
Cash in Bank	21 9 8	3,56,335 9 8	
			3,79,474 8 1

SINKING FUND:—

	Face Value.	Actual Cost.	Cash Deposits.		
	Rs. a. p.	Rs. a. p.	Rs. a. p.		
5% LOANS SINKING FUND DEPOSIT ACCOUNT —					
5% Municipal Debentures.	36,60,500 0 0	36,60,500 0 0			
4% Do. do. ...	9,96,000 0 0	9,96,000 0 0			
4% Bombay Improvement Trust Debentures ...	23,39,000 0 0	23,39,000 0 0			
4% Government Paper of the Conversion Loan of 1916-17	24,00,000 0 0	24,00,000 0 0			
Total ...	93,95,500 0 0	93,95,500 0 0	3 2 0	93,95,503 2 0	
4% LOANS SINKING FUND DEPOSIT ACCOUNT (3½% BASIS)—					
4% Municipal Debentures.	65,56,500 0 0	65,56,368 2 0			
4% Bombay Improvement Trust Debentures ...	5,39,000 0 0	5,39,000 0 0			
4% Bombay Port Trust Bonds	5,53,000 0 0	5,53,000 0 0			
5½% Indian War Bonds 1920	12,33,500 0 0	12,33,500 0 0			
Total ...	88,82,000 0 0	88,81,868 2 0	302 5 0	88,82,170 7 0	
			Sinking Fund carried forward Rs.	1,82,77,673 9 0	
			Carried over Rs. ...		9,01,32,171 15 4

Appendix

CAPITAL FUND BALANCE

	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought over Rs. ..	.....	7,69,06,638 11 9	
Bombay Improvement Trust.—			
Book Value of Municipal Land at Agripada Transferred ...	.....	17,15,289 5 11	7,86,21,928 1 8
Municipal Lands and Buildings Fund	.....	3,79,474 8 1	
Surplus—			
CAPITAL ASSETS AT ORIGINAL COST OVER LIABILITIES :—			
Sinking Funds on Loans	2,14,19,973 10 4		
Loans repaid, etc.	84,91,960 6 6		
Unbooked Property	45,37,835 11 11		
Contributions from Special Funds	8,31,231 0 3		
„ „ G. I. P. Ry.	3,74,000 0 0		
„ „ Port Trust	1,56,500 0 0		
„ „ Government for Schools	2,68,507 10 0		
„ „ Water Mains Renewal Fund	2,11,579 9 9		
Premia on Loans	2,93,848 11 11		
Total Rs. ...	3,65,85,436 12 8		
Deduct—			
Plague Loan 20,00,000 0 0			
Assets written off 2,92,469 15 0			
	22,92,469 15 0	3,42,92,966 13 8	
			3,46,72,441 5 9
Total Rs. ...			11,32,94,369 7 5

D. ROBERTSON,
Acting Chief Accountant.

No. 6—*concluded.*

SHEET AS AT 31ST MARCH 1919.

				Rs. a. p.	Rs. a. p.
			Brought over Rs. ...		9,01,82,171 15 4
			Sinking Fund brought over Rs.	1,82,77,673 9 0	
	Face Value.	Actual Cost.	Cash Deposit.		
4 % LOANS SINKING FUND DEPOSIT ACCOUNT (3 % BASIS)—					
4 % Municipal Debentures	27,61,000 0 0	27,61,000 0 0			
Total ...	27,61,000 0 0	27,61,000 0 0	135 7 4	27,61,135 7 4	
3½ % LOANS SINKING FUND DEPOSIT ACCOUNT—					
4% Bombay Improvement Trust Debentures ...	3,83,500 0 0	3,80,701 9 0			
Total ...	3,83,500 0 0	3,80,701 9 0	463 1 0	3,81,164 10 0	(a) 2,14,19,973 10 4
SURPLUS LOAN FUNDS—					
Cash on deposit and current Accounts with Banks ...				17,42,223 13 9	‡17,42,223 13 9
Total Rs. ...					11,32,94,369 7 5

‡ Of this Rs. 54,547-2-10 belong to Water Works Account.

(*a*) For Face and Market value of each kind of security held in the Sinking Funds, please see Appendix No. 6A attached.

P. W. MONIE,
Municipal Commissioner.

Appendix No. 6A.

Comparison of Face, Purchase and Market Values at 31st March 1919 of the different Securities held in the Sinking Funds.

N. B.—Special attention is invited to para. 41 of Chief Accountant's Report.

Name of Fund.	Particulars of Securities.	Face value.	Purchase rate.	Actual cost at Purchase rate.	Market rates.	Value at Market rates.
		Rs.		Rs. a. p.		Rs. a. p.
5 per cent. Loans Sinking Fund Deposit Account.	5 per cent. Municipal Debentures.	36,60,500	Par	36,60,500 0 0	Par	36,60,500 0 0
	4 per cent. Municipal Debentures.	9,96,000	„	9,96,000 0 0	81%	8,06,760 0 0
	4 per cent. Bombay Improvement Trust Debentures.	23,39,000	„	23,39,000 0 0	80%	18,71,200 0 0
	4 per cent. Government Paper of the Conversion Loan of 1916-17.	24,00,000	„	24,00,000 0 0	84%	20,16,000 0 0
	Total Rs. ...	93,95,500		93,95,500 0 0		83,54,460 0 0
4 per cent. Loans Sinking Fund Deposit Account (3½ per cent. Basis).	4 per cent. Municipal Debentures.	64,79,000	Par	64,79,000 0 0		
	Do. ...	500	102 per cent.	510 0 0		
	Do. ...	7,500	101¾ „	7,631 4 0		
	Do. ...	500	99 „	495 0 0		
	Do. ...	500	98¾ „	493 12 0		
	Do. ...	4,500	98 „	4,410 0 0		
	Do. ...	5,000	97¼ „	4,862 8 0		
	Do. ...	3,000	97 „	2,910 0 0		
	Proportionate value	56,000		56,055 10 0		
		65,56,500		65,56,368 2 0	81%	53,10,765 0 0
	4 per cent. Bombay Improvement Trust Debentures.	5,39,000	Par	5,39,000 0 0	80%	4,31,200 0 0
	4 per cent. Bombay Port Trust Bonds.	5,53,000	„	5,53,000 0 0	82%	4,53,460 0 0
	5½ per cent. Indian War Bonds... (1920).	12,33,500	„	12,33,500 0 0	Par	12,33,500 0 0
	Total Rs. ...	88,82,000		88,81,868 2 0		74,28,925 0 0
	Carried over Rs. ...	1,82,77,500		1,82,77,368 2 0		1,57,83,385 0 0

Appendix No. 6A—*concluded.*

Name of Fund.	Particulars of Securities.	Face value.	Purchase rate.	Actual cost at Purchase rate.	Market rates.	Value at Market rates.
		Rs.		Rs. a. p.		Rs. a. p.
	Brought forward Rs. ...	1,82,77,500		1,82,77,368 2 0		1,57,83,385 0 0
4 per cent. Loans Sinking Fund Deposit Account (3 per cent. Basis).	4 per cent. Municipal Debentures.	27,61,000	Par	27,61,000 0 0	81%	22,36,410 0 0
	Total Rs. ...	27,61,000		27,61,000 0 0		22,36,410 0 0
3½ per cent. Loans Sinking Fund Deposit Account.	4 per cent. Bombay Improvement Trust Debentures.	2,62,200	Par	2,62,200 0 0		
	Do ...	500	101 11/16 per cent.	508 7 0		
	Do. ...	500	101 1/8 ,,	505 10 0		
	Do. ...	3,600	101 ,,	3,636 0 0		
	Do. ...	11,500	100 7/8 ,,	11,600 15 0		
	Do. ...	800	99 1/4 ,,	794 0 0		
	Do. ...	500	99 1/8 ,,	495 10 0		
	Do. ...	600	98 7/16 ,,	590 10 0		
	Do. ...	4,500	98 3/8 ,,	4,426 14 0		
	Do. ...	12,100	98 1/4 ,,	11,888 4 0		
	Do. ...	29,300	98 5/16 ,,	28,768 15 0		
	Do. ...	600	98 1/8 ,,	588 12 0		
	Do. ...	13,700	97 1/4 ,,	13,391 12 0		
	Do, ...	700	97 9/16 ,,	682 15 0		
	Do. ...	1,100	97 1/2 ,,	1,072 8 0		
	Do. ..	500	96 7/8 ,,	484 6 0		
	Do. ...	12,000	96 1/4 ,,	11,580 0 0		
	Do. ...	12,700	96 5/16 ,,	12,231 11 0		
	Do. ...	700	96 1/16 ,,	672 7 0		
	Do, ...	500	96 ,,	480 0 0		
	Do. ...	500	95 13/16 ,,	479 1 0		
	Do. ...	500	95 11/16 ,,	478 7 0		
	Do. ...	700	95 3/8 ,,	667 10 0		
	Do, ...	1,300	94 3/4 ,,	1,137 0 0		
	Do. ...	12,000	94 1/2 ,,	11,340 0 0		
	Total Rs. ...	3,83,500		3,80,701 9 0	80 %	3,06,800 0 0
	Grand Total Rs. ...	2,14,22,000		2,14,19,069 11 0		1,83,26,595 0 0

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

Appendix

STATEMENT showing (1) the various Municipal Loans and their Amounts, (2) the Expenditure meet the cost of New Works, &c., and (4) Invested

Serial No.	NAME AND DATE OF LOAN.	Amount raised.	Transferred to meet the cost of New Works provided out of savings.	Net Amount available for expenditure.	A—Buildings, Lands and Sanitary Structures.	B—Roads and Over-Bridges.
	1	2	3	4	5	6
		Rs.	Rs a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Drainage Loan of 1878	26,94,000	—24,719 6 0	26,69,280 10 0	....	....
2	Surface Drainage Works	6,00,000	....	6,00,000 0 0	....	....
3	Sanitary Works Loan (44 lakhs)..	44,00,000	—77,275 8 8	43,22,724 7 4	87,110 9 0	1,41,500 1 2
4	Tansa Water Works (147 lakhs)	1,47,00,000	—4,496 1 0	1,46,95,503 15 0	....	....
5	Sanitary Works Loan of 1887-88..	7,00,000	—95,421 10 8	6,04,578 5 4	....	....
6	Sewerage Works and Water Supply Improvement (12 lakhs)	12,00,000	—2,18,531 7 10	9,81,468 8 2	....	....
7	Markets and other Miscellaneous Works (Rs. 10,08,500) ..	10,08,500	—2,57,299 4 8	7,51 200 11 4	4,88,906 2 8	69,683 6 8
8	House Sullage Water Connections, Agripada	2,48,000	—14,466 3 2	2,33,533 12 10	....	....
9	Various Sanitary Works (35 lakhs)	35,00,000	—4,09,579 7 4	30,90,420 8 8	5,85,193 12 2	14,91,224 2 9
10	New Municipal Office Building (8 lakhs)	8,00,000	—66,939 13 0	7,33,060 3 0	† 7,33,060 3 0	....
11	Fire Brigade Quarters and Stations (4½ lakhs)	4,50,000	—46,679 9 11	4,03,320 6 1	4,03,320 6 1	....
12	Drainage Water Works, Roads and other Works (23½ lakhs)	23,25,000	—2,77,249 3 7	20,47,750 12 5	....	1,47,734 9 4
13	Sewerage, Wari Bunder, &c., Roads, Burial-ground and certain Water Works (15¾ lakhs)	15,75,000	—3,09,684 2 5	12,65,315 13 7	....	‡ 3,48,745 6 10
14	Sewerage Water and other Sanitary Works (25 lakhs) ..	25,00,000	—37,383 11 0	24,62,616 5 0	....	....
15	Plague Charges (20 lakhs)..	20,00,000	....	20,00,000 0 0	....	....
16	Sewerage, Roads and other Sanitary Works (19¼ lakhs)	19,25,000	—2,25,808 11 0	16,99,191 5 0	....	....
17	Sewerage and Water Works (24¾ lakhs)	24,75,000	—4,11,753 2 7	20,83,246 13 5	....	....
18	Certain Water Works (12¾ lakhs)	12,75,000	—1,74,943 15 1	11,00,056 0 11	....	....
19	Sewerage Works (2nd 24¾ lakhs)..	24,75,000	—2,40,266 9 9	22,34,733 6 3	....	....
20	Construction of Quarters for Halalkhores and Bigaries (13½ lakhs)	13,50,000	—71,109 10 11	12,78,890 5 1	11,50,458 13 9	....
21	Street Improvements (15 lakhs)	15,00,000	....	15,00,000 0 0	....	15,00,000 0 0
22	Acquisition of sites for Overbridges (30 lakhs) .. .	30,00,000	....	30 00,000 0 0	....	26,13,882 7 4
23	Miscellaneous Works (55 lakhs)	55,00,000	—3,39,617 2 4	51,60,382 13 8	8,62,938 1 4	1,73,261 4 8
24	Tansa Reduplication (70 lakhs)..	70,00,000	—9,262 15 7	69,90,737 0 5	....	....
25	Street Improvements (20 lakhs)	20,00,000	....	20,00,000 0 0	....	19,76,519 9 0
26	Drainage, Water Works and Miscellaneous Works (43 lakhs)	43,00,000	—3,2 ,931 5 10	39,75,048 10 2	5,00,119 13 7	3,98,137 2 3
27	Sanitary Works, Drainage and Miscellaneous Works (2nd 30 lakhs)	30,00,000	..	30,00,000 0 0	5,84,266 1 7	30,307 4 8
		(a) 7,45,00,500	—36,37,439 2 4	7,08,63,060 13 8	53,93,373 15 8	86,11,795 6 8
28	Works executed out of Savings on Loans	....	....	36,37,459 2 4	4,95,657 13 5	4,99,317 11 10
	Total Rs. .	....	....	7.45,00.500 0 0	58,89,031 13 1	93,11,113 2 6

* Including Rs. 1,94,031-13-3 written-off in 1902-03 on account of properties not then existing.

† Excluding Rs. 7,34,326-8-3 paid out of the Invested Fund.

‡ Excluding Rs. 1,56,500-0-0 contributed by the Port Trust.

†† Including Rs. 98,438-1-9 written-off in 1902-03 on account of properties not then existing.

§ Including Rs. 20,00,000 paid on account of Plague charges.

¶ Excluding Rs. 2,40,000 paid out of the Premia received on the Loan.

D. ROBERTSON,
Acting Chief Accountant.

No. 7.

incurred against each of them, (3) the Amounts withdrawn temporarily from their unutilized Balances to Balances of the Loans on 31st March 1919.

Expenditure on Works upto 31st March 1919.						Balance unexpended on 1st April 1919.	Amount advanced to meet the cost of sanctioned New Works, for which loans are to be raised.	Balances invested.
C—Drainage.	D—Water Works.	E—Cemeteries (Burning and Burial-grounds).	F—Disposal of Town Sweepings.	G—Miscellaneous.	Total Amount expended on works upto 31st March 1919.			
7	8	9	10	11	12	13	14	15
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
*16,52,449 12 9	10,16,830 13 3	....	....	....	26,69,280 10 0	....	....	....
6,00,000 0 0	....	....	....	....	6,00,000 0 0	....	....	....
††21,98,166 0 8	18,95,947 12 4	....	....	....	43,22,724 7 4	....	....	....
.... ¶	1,46,95,503 15 0	....	....	....	1,46,95,503 15 0	....	....	....
4,62,337 0 0	1,42,241 5 4	....	....	....	6,04,578 5 4	....	....	....
9,01,437 8 2	80,031 5 0	....	....	....	9,81,468 8 2	....	....	....
58,396 14 10	1,16,314 3 2	....	....	....	7,51,200 11 4	....	....	....
2,33,533 12 10	....	....	....	....	2,33,533 12 10	....	....	....
13,864 7 3	8,01,079 9 10	....	1,98,913 8 8	....	30,90,275 8 8	145 0 0	145 0 0	....
....	....	....	....	....	7,33,060 3 0	....	....	....
....	....	....	....	....	4,03,320 6 1	....	....	....
17,44,602 15 5	1,49,522 5 7	....	5,990 14 1	....	20,47,750 12 5	....	....	....
5,69,077 1 0	12,842 13 10	2,11,652 4 5	....	....	11,42,317 10 1	1,22,998 3 6	1,22,998 3 6	....
11,25,083 14 4	2,04,268 6 8	3,49,264 0 0	1,84,000 0 0	....	24,62,616 5 0	....	....	....
....	....	....	....	20,00,000 0 0	20,00,000 0 0	..	....	....
14,53,566 3 4	....	47,630 4 4	53,619 13 4	4,946 8 0	15,59,812 13 6	1,39,378 7 6	1,39,378 7 6	....
17,16,596 0 7	2,54,554 8 11	.. .	....	....	19,71,150 9 6	92,096 3 11	92,096 3 11	....
....	10,94,278 5 8	.. .	....	....	10,94,278 5 8	5,777 11 3	5,777 11 3	....
18,47,307 6 3	....	...	....	....	18,47,307 6 3	3,87,426 0 0	3,87,426 0 0	....
....	....	....	...	....	11,50,458 13 9	1,28,431 7 4	1,28,431 7 4	....
....	....	....	....	....	15,00,900 0 0	..	....	....
....	....	....	....	. ..	25,13 882 7 4	4,86,117 8 8	4,86,117 8 8	.. ...
31,49,828 14 4	3,70,044 7 3	91,339 6 9	....	58,957 15 9	47,09,240 2 1	4,51,142 11 7	4,51,142 11 7	....
....	69,90,691 7 5	....	....	....	69,90,691 7 5	45 9 0	45 9 0	....
....	....	....	....	....	19,76,519 9 0	23,480 7 0	23,480 7 0	....
20,22,275 1 9	98,314 10 8	....	....	1,52,949 11 1	31,72,126 7 4	8,02,922 2 10	1,93,213 1 0	6,09,709 1 10
13,38,867 11 8	.. .	51,500 0 0	....	....	20,05,441 1 11	9,94,558 14 1	....	9,94,558 14 1
2,10,87,390 8 2	2,79,22,396 1 7	7,54,405 15 6	10,42,424 4 1	22,16,754 3 4	6,72,28,540 7 0	36,34,520 6 8	20,30,252 6 9	16,04,267 15 11
14,65,119 7 11	9,61,135 3 3	23,278 9 6	38,634 2 0	21,602 4 7	35,01,795 4 6	1,32,643 13 10	....	1,32,643 13 10
2,25,52,510 0 1	2,88,83,531 4 10	7,77,684 9 0	10,81,108 6 1	22,38,356 7 11	7,07,33,335 11 6	37,67,164 4 6	20,30,252 6 9	17,36,911 13 9
Less—Old Workshops and Stores shed (Amount of old corrugated sheets transferred to New Municipal Workshops) Rs.					*Cr.* 5,312 0 0	5,312 0 0	....	5,312 0 0
				Total Rs. ..	7,07,28,023 11 6	37,72,476 4 6	‡20,30,252 6 9	17,42,223 13 9
				Add—Amount of Advances in column 14 ..	20,30,252 6 9			
				Grand Total Rs	7,27,58,276 2 3 (b)			

(a) Amount of Loans raised .. .. Rs. 7,45 00,503 0 0

(b) Amount expended . .. . ,, 7,27,58,276 2 3

Invested Balance (*vide* Appendix 6, page 75) .. .. Rs. 17,42,223 13 9

‡ Of this Rs. 2,39,090-5-4 belong to Water Works Account.

P. W. MONIE,
Municipal Commissioner.

Appendix No. 8.

Block Account showing details of Capital Expenditure up to 31st March 1919.

	Capital Expenditure up to 31st March 1918.	Expended during the year.	Total Capital Expenditure up to 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—BUILDINGS, LANDS AND SANITARY STRUCTURES—				
MARKETS AND SLAUGHTER HOUSES—				
Extending and Improving the Arthur Crawford Market	1,409 1 7	377 2 2	1,786 3 9	
Bandra Slaughter Houses	2,34,297 12 8	.....	2,34,297 12 8	
Null Bazar Market	1,50,770 1 7	.....	1,50,770 1 7	
Fort Market	22,066 7 11	.....	22,066 7 11	
Arthur Crawford Market	11,39,410 11 6	.....	11,39,410 11 6	
Market at Colaba	1,22,453 15 11	.....	* 1,22,453 15 11	
Extension of Erskine Road Market ...	4,31,666 11 11	.....	† 4,31,666 11 11	
Extension of the Arthur Crawford Mutton Market	42,754 2 9	.....	42,754 2 9	
Bhuleshwar Market Extension	3,22,817 1 11	.....	3,22,817 1 11	
Labourers' Quarters in connection with the Arthur Crawford Market ...	9,518 14 3	.....	9,518 14 3	
Foras Road Market	40,499 14 11	.....	40,499 14 11	
Construction of shops on the western and southern sites at the Arthur Crawford Markets, Hornby Road ...	4,822 7 10	.....	4,822 7 10	
Renewing the two blocks of the Butchers' Chawl at the Bandra Slaughter Houses	22,020 5 4	.....	22,020 5 4	
Currey Road Market	15,252 5 10	.....	15,252 5 10	
Market at Chowpati	63 0 0	.....	63 0 0	
Market at Elphinstone Road	15,242 13 8	.....	15,242 13 8	
Constructing a Chawl of 52 rooms at the Bandra Slaughter Houses ...	31,240 0 8	.....	31,240 0 8	
Market at Kamatipura	50,644 11 2	.....	50,644 11 2	
Filling in ground at Bandra Slaughter Houses	.....	40 13 9	40 13 9	
	26,56,950 13 5	417 15 11	26,57,368 13 4	
FIRE BRIGADE—				
Land and Buildings for Fire Brigade ...	4,03,320 6 1	.....	4,03,320 6 1	
Construction of additional quarters for the Fire Brigade Staff at Byculla Fire Brigade Station	30,995 8 8	.....	30,995 8 8	
Construction of an Engine House and Foreman's quarters at the Sankli Tank Fire Brigade Station	26,552 13 0	.....	26,552 13 0	
Constructing additional rooms and adding a storey over several Fire Brigade Stations to provide accommodation for additional staff ...	12,437 5 7	.....	12,437 5 7	
Construction of a Fire Brigade Station at Elphinstone Bridge Road	62,608 13 5	.....	62,608 13 5	
Providing living and other accommodation at the Gowalia Tank Road, Babula Tank, Chinchpokli and Sankli Tank Fire Brigade Stations ...	12,527 2 2	.....	12,527 2 2	
Constructing Lascars' Quarters, &c., at Gowalia Tank Fire Brigade Station .	8,983 1 10	.....	8,983 1 10	
Constructing new quarters for an Engineer and ten Lascars at Sankli Tank Fire Brigade Station	13,537 13 11	.....	13,537 13 11	
Construction of a cook-room in connection with the existing Engineer's Quarters and two nahanis in connection with the Lascars' quarters at Sankli Tank Fire Brigade Station .	1,382 10 3	.....	1,382 10 3	
Construction of an additional storey over the Bhuleshwar Fire Brigade Station	6,902 12 3	.....	6,902 12 3	
Acquisition of land for a new Fire Brigade Station for the Fort District.	95,600 0 0	.....	95,600 0 0	
	6,74,848 7 2	.....	6,74,848 7 2	
WORKSHOPS—				
Workshop and Store shed	1,43,767 7 1	.....	1,43,767 7 1	
Construction of new Municipal Workshops at Foras Road	4,95 477 2 0	9,028 2 3	5,04,505 4 3	
	6,39 244 9 1	9,028 2 3	6,48,272 11 4	
A.—Buildings, Lands and Sanitary Structures—carried over ... ... Rs. ...	39,71,043 13 8	9,446 2 2	39,80,489 15 10	

* Inclusive of Rs. 21,940 paid out of the premia received on the loan, and Rs 28,060 paid out of savings on different loans.
† Inclusive of Rs. 31,908-11-11 paid out of the premia received on the loan.

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A—Buildings, Lands and Sanitary Structures—brought forward ... Rs. ...	39,71,043 13 8	9,446 2 2	39,80,489 15 10	
STABLES, CHAWLS AND QUARTERS (HEALTH DEPARTMENT)—				
Enlargement of Dhobi lines at Mahalaxmi	28,499 12 3	.....	28,499 12 3	
Chawl for Gowlies working at the Agripada Milch-Cattle stables ...	6,129 13 6	.....	6,129 13 6	
Health Department stables at Bori Bunder	43,677 13 3	.....	43,677 13 3	
Establishment charges for the above three works	8,803 2 6	.....	8,803 2 6	
Health Department Bullock stables and Quarters for scavengers	1,23,897 4 11	.....	1,23,897 4 11	
Chawl for halalkhores in Cursetji Suklaji Street	88,460 8 2	.....	88,460 8 2	
Construction of chawls, &c., for halalkhores at Valpakhadi (Mazagon) ...	2,31,478 6 9	.....	2,31,478 6 9	
Construction of semi-permanent huts for biggaries at Arthur Road ...	28,379 0 10	.....	28,379 0 10	
Construction of chawls for halalkhores, &c, at Cochin Street, Fort	56,554 5 6	.....	56,554 5 6	
Construction of stables for the Health Department on the Grant Road Hospital site	47,334 4 7	.....	47,334 4 7	
Construction of the Sankli Tank Bullock Hospital with residential quarters for Inspector and Shalotri	1,34,428 6 6	.....	1,34,428 6 6	
Construction of a stable for bullocks of Night Branch and an office at Arthur Road	64,655 2 4	.....	64,655 2 4	
Construction of stables and chawls for B Ward at Jail Road, North... ...	1,65,522 11 4	.....	1,65,522 11 4	
Construction of stables and chawls for D Ward bullocks and biggaries at Annesley Road...	1,37,998 10 3	.....	1,37,998 10 3	
Construction of Chawls for Biggaries at Arthur Road ...	1,22,312 3 9	.....	1,22,312 3 9	
Construction of a stable for E Ward, West of Kamatipura	62,232 15 4	.....	62,232 15 4	
Construction of semi-permanent huts for halalkhores at Tardeo Flats ...	1,39,418 7 5	10,928 9 0	1,50,347 0 5	
Construction of a stable for bullocks at Mahim	81 9 0	.....	81 9 0	
Acquisition of land and properties at Jail Road, North, for the construction of stables and chawls for the Health Department	1,92,581 0 0	.....	1,92,581 0 0	
Construction of two additional chawls for biggaries at Chembur ...	17,122 12 10	.....	17,122 12 10	
Health Department stables in F and G Wards	68,120 8 2	.....	68,120 8 2	
Health Department biggaries' chawl at Bori Bunder	50,058 0 7	.....	50,058 0 7	
Acquisition of land at Colaba as a site for quarters for Halalkhores	4,312 15 5	.....	4,312 15 5	
Construction of semi-permanent quarters for halalkhores on the Foras Tank site	39,183 6 3	.....	39,183 6 3	
Construction of chawls for the Health Department biggaries of F Ward ...	76,887 4 0	63,667 13 2	1,40,555 1 2	
Construction of chawls for halalkhores and biggaries at Valpakhady ...	69,462 1 8	21,273 5 2	90,735 6 10	
Chawls for Health Department biggaries at Paltan Road	2,041 7 0	1,738 1 6	3,779 8 6	
	20,09,634 2 1	97,607 12 10	21,07,241 14 11	
SCHOOL BUILDINGS—				
Construction of buildings for Primary Schools	5,34,050 14 1	2,964 5 11	‡ 5,37,015 4 0	
MUNICIPAL OFFICE BUILDINGS—				
Municipal Office Buildings	14,67,386 11 3	.....	† 14,67,386 11 3	
A.—Buildings, Lands and Sanitary Structures—carried over ... ... Rs. ...	79,82,115 9 1	1,10,018 4 11	80,92,133 14 0	

‡ Inclusive of Rs. 2,68,507-10-0 incurred on behalf of Government against their contribution of Rs. 2,86,750.

† Inclusive of Rs. 7,34,326-8-3 paid out of the Invested Fund.

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
A.—Buildings, Lands and Sanitary Structures—brought forward .. Rs. ...	79,82,116 9 1	1,10,018 4 11	80,92,133 14 0	
MISCELLANEOUS STRUCTURES—				
Girgaum Police Court (Share of) ...	34,000 0 0	.....	34,000 0 0	
Building a new office in Sankli Street for the use of the Assessment Department, E Ward Office, and constructing A Ward office, chowkidar's quarters and Store Room for the Streets and Buildings branch, E Ward, in Sankli Street	22,871 7 10	.....	22,871 7 10	
Building a new office at Dadar for the use of the Assessment Department, F and G Ward offices, and converting the existing ward office into a godown and providing latrines for the workmen	13,419 6 9	.....	13,419 6 9	
Construction of A Ward offices for the different branches of the Engineer's Department at Mint Road	20,856 6 6	.....	20,856 6 6	
Purchase of about 4,030 square yards of land at the junction of Bapty Road and Falkland Road belonging to the Tramway authorities...	1,17,034 14 6	.....	1,17,034 14 6	
Making alterations in the three permanent wards of the Arthur Road Hospital and in gas and other lighting arrangements in the compound, wards, &c., in the Arthur Road Hospital	21,955 10 9	.....	21,955 10 9	
Construction of 25 bathing places in the City...	28,068 3 6	1,083 2 10	29,151 6 4	
Construction of Incinerators for Refuse destruction	71 7 7	.....	71 7 7	
Construction of new ward offices at Babula Tank for the Assessment and Health Departments...	48 6 0	.....	48 6 0	
Latrines at Colaba	20,290 13 10	.....	20,290 13 10	
Providing latrines and urinals at different places	59,432 10 3	.....	59,432 10 3	
Providing accommodation, &c., for the General Stores...	38,253 5 5	.....	38,253 5 5	
Providing wooden racks in Block No. 2 of the Central Stores building at Chinchpokli	2,495 5 4	.....	2,495 5 4	
Constructing office quarters and store-room for Streets and Buildings Branch in G Ward at DeLisle Road on the site of Foras tank	19,391 14 9	.....	19,391 14 9	
Construction of 11 urinals on Port Trust ground near the Docks ...	6,502 13 2	.....	6,502 13 2	
Acquisition of a plot of land at Ormiston Road from the Bombay Electric Supply and Tramways Company, Limited, for a Metal Depôt	1,49,492 8 0	.....	1,49,492 8 0	
Acquisition of land for a stone depôt on Golanji Hill	71,084 1 7	.....	71,084 1 7	
Providing bungalows for Engineers and quarters for servants and Engine Drivers at Love Grove Pumping Station	16,870 6 0	.....	16,870 6 0	
Acquisition of land and buildings at Worli Hill for the purpose of quarters for the Love Grove Station Engineering staff and filling in the vacant Municipal land required for Central Stores, Infectious Diseases Hospital, &c., out of the materials therefrom	1,76,644 0 0	7,544 15 7	1,84,188 15 7	
Construction of King Edward VII Memorial Hospital (Municipal Share of Cost)	.....	3,15,500 12 1	3,15,500 12 1	
Extension of Arthur Road Infectious Diseases Hospital	.....	31 11 4	31 11 4	
Cost of a plot of land at Clerk Road required for the use of the Road department for stacking materials, parking carts, etc.	.....	24,300 0 0	24,300 0 0	
	8,18,783 13 9	3,48,460 9 10	11,67,244 7 7	
A.—Buildings, Lands and Sanitary Structures—Total ... ... Rs. ...	88,00,899 6 10	4,58,478 14 9	92,59,378 5 7	
Carried over Rs. ...	88,00,899 6 10	4,58,478 14 9	92,59,378 5 7	92,59,378 5 7

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	GRAND TOTAL.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs....	88,00,899 6 10	4,58,478 14 9	92,59,378 5 7	92,59,378 5 7
B—ROADS AND OVERBRIDGES—				
OVERBRIDGES—				
Widening Elphinstone Bridge	30,807 4 8	.....	30,807 4 8	
Overbridges	1,97,563 0 1	.....	1,97,563 0 1	
Falkland Road Bridge	15,082 9 4	.....	15,082 9 4	
Wari Bunder Bridge	1,52,652 0 0	.....	1,52,652 0 0	
Overbridge at Elphinstone Road, B. B. & C. I. P. Railways	2,57,163 14 1	5,748 14 7	2,62,912 12 8	
Overbridge at Arthur Road, G. I. P. Railway...	1,96,754 4 7	.....	1,96,754 4 7	
Overbridge at Currey Road, G. I. P. Railway...	5,29,286 10 5	.....	5,29,286 10 5	
Overbridge at Clerk Road, G. I. P. Railway...	2,86,055 2 7	....	2,86,055 2 7	
Overbridge at Clerk Road, B. B. & C. I. Railway	70,458 11 0	*Cr.* 52 2 8	70,406 8 4	
Overbridge at DeLisle Road	10,74,719 1 6	24,319 8 0	10,99,038 9 6	
Establishment, &c., charges for the above six overbridges...	68,668 7 3	760 0 0	69,428 7 3	
Nesbit Road Bridge (portion of cost) ..	49,844 8 0	.....	49,844 8 0	
	29,09,055 9 6	30,776 3 11	29,39,831 13 5	
CONSTRUCTION OF ROADS—				
Foras Road	1,12,418 14 10	.....	1,12,418 14 10	
Nowroji Hill Road	57,913 3 0	.....	57,913 3 0	
Road from Bellasis Road across Old Race Course (including Establishment charges)	1,41,500 1 2	.....	1,41,500 1 2	
Cross Road at Mahaluxmi Station from Clerk Road to Haines Road...	19,594 4 8	.....	19,594 4 8	
Road through Nowroji Hill from Elphinstone Bridge to Dongri Street	70,089 2 0	.....	70,089 2 0	
Roads and Streets in Agripada and elsewhere	14,67,006 2 10	.....	14,67,006 2 10	
New Road from Jakeria Bunder Road to Sewri Cemetery	24,217 15 11	.....	24,217 15 11	
Wari Bunder Road	4,74,349 12 6	.....	† 4,74,349 12 6	
Victoria Road Extension	30,895 10 4	.....	30,895 10 4	
Construction of a new road through Cavel from Girgaum Road to Kalbadevi Road upto the Church of Lady of Health	1,32,943 9 11	.....	1,32,943 9 11	
Widening of Cruickshank Road and improvement of the corner of Cruickshank and Elphinstone Roads ...	40,317 10 9	.....	40,317 10 9	
Construction of a Road from the B. B. & C. I. Railway Matunga Station westward to Mahim including storm-water drains	1,84,460 0 10	.....	1,84,460 0 10	
Construction of a 60 feet road along Tulsi Pipe Line from DeLisle Road to Dadar Road including storm-water drains, and other roads	6,559 10 2	430 4 5	6,989 14 7	
Widening of Queen's Road from the Church Gate Railway Station to Wodehouse Bridge	37,944 9 0	.....	37,944 9 0	
Providing and fixing new pattern hydrants for watering and Fire Brigade purposes	50,000 0 0	.....	50,000 0 0	
Diversion of Arthur Road over the masonry culvert	16,266 11 1	.....	16,266 11 1	
Construction of a road running eastwards from Lady Hardinge Road to the G. I. P. Railway new level crossing at Matunga and providing storm-water drain thereat	70,736 0 0	6,195 11 0	76,931 11 0	
Widening and improving Cumballa Hotel Lane and Gowalia Tank Road (Municipal contribution)	30,928 11 0	.....	30,928 11 0	
Acquisition of land at different places as sites for new roads...	9,564 15 0	.....	9,564 15 0	
Construction of Roads—Carried over Rs.	29,77,707 1 0	6,625 15 5	29,84,333 0 5	
B.—Roads and Overbridges do. Rs.	29,09,055 9 6	30,776 3 11	29,39,831 13 5	
Carried over Rs	38,09,899 6 10	4,58,478 14 9	92,59,378 5 7	92,59,378 5 7

† Inclusive of Rs. 1,56,500 contributed by the Port Trust.

Appendix No. 8—*continued.*

—	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto to 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	88,00,599 6 10	4,58,478 14 9	92,59,378 5 7	92,59,378 5 7
B—Roads and Overbridges—Brought forward Rs. ..	29,09,055 9 6	30,776 3 11	29,39,831 13 5	
Construction of Roads, brought forward Rs.	29,77,707 1 0	6,625 15 5	29,84,333 0 5	
Lowering a portion of Masjid Bunder Road	1,970 3 6	22,431 3 0	24,401 6 6	
Acquisition of land at Dadar	151 0 0	.....	151 0 0	
Acquisition of 337·11 square yards of land from Mr. Sharifbhai Thavar for the construction of the road from Haines Road to Ripon Road... ...	2,205 14 7	.....	2,205 14 7	
Acquisition of land at Maruti Lane	5,433 0 0	.....	5,433 0 0	
Acquisition of land at Gola Lane ..	7,038 7 0	.....	7,038 7 0	
Acquisition of 242·22 square yards near the Parel Station of the B. B. & C. I. Railway	1,695 8 8	.....	1,695 8 8	
Acquisition of land at King Lane ..	13,439 8 3	.....	13,439 8 3	
Do. at Fergusson Road Passage...	1,301 7 7	.....	1,301 7 7	
Acquisition of land at Hamalwadi ..	58,139 13 7	.....	58,139 13 7	
Do. at Clerk Road ...	5,330 12 10	.....	5,330 12 10	
Do. at Piru Lane ...	64,508 3 11	.....	64,508 3 11	
Do. at Goga Street ...	20,920 13 5	.....	20,920 13 5	
Do. at the junction of Gun Carriage Street and Thomas Street	4,357 0 0	.....	4,357 0 0	
Acquisition of land at Nishanpada Road	610 15 3	.....	610 15 3	
Acquisition of land at Chunam Kiln Cross Lane	573 13 5	.....	573 13 5	
Acquisition of land at Old Nagpada Street	1,817 3 11	.....	1,817 3 11	
Widening and extending Nesbit Road .	1,57,403 3 7	40,439 3 0	1,97,842 6 7	
Widening of Worli Road from its junction with Haines and Fergusson Roads to the Worli Channel ...	97,804 1 2	47,944 8 11	1,45,748 10 1	
Construction of a road from Mount Road through Rose Cottage Lane to Matharpakhadi	45,620 9 2	.....	45,620 9 2	
Construction of Dadar Kumbharwada Road	.....	1,69,042 9 10	1,69,042 9 10	
Widening and reconstructing Mahim Bazar Road	.....	3,56,650 5 6	3,56,650 5 6	
Widening and improving Waudby Road	.....	36,673 8 11	36,673 8 11	
Paving Frere Road with wooden blocks.	.....	911 7 6	911 7 6	
	34,68,028 12 10	6,80,718 14 1	41,48,747 10 11	
Street Improvements.				
Street Improvements in different places.	35,10,973 6 11	2,05,566 2 1	37,16,519 9 0	
Special Street Improvements	19,000 0 0	.....	19,000 0 0	
	35,29,953 6 11	2,05,566 2 1	37,35,519 9 0	
B—Roads and Overbridges—Total Rs.	99,07,037 13 3	9,17,061 4 1	1,08,24,099 1 4	1,08,24,099 1 4
C.—DRAINAGE WORKS—				
Fort Sewers	78,627 4 8	.....	78,627 4 8	
Kamatipura Drain	1,91,047 8 10	.....	1,91,047 8 10	
Drains in Fanaswadi and Agiary Lane.	1,852 12 3	.....	1,852 12 3	
Branch Sewers, Bellasis Road ...	7,102 6 1	.....	7,102 6 1	
Widening Love Grove Sluices ...	1,57,326 7 7	.....	1,57,326 7 7	
Culverts under the B. B. & C. I. Railway near Bellasis Road	1,791 0 8	.....	1,791 0 8	
Khetwadi Survey	5,599 10 0	.....	5,599 10 0	
Raising Level of Khetwadi Roads ...	28,355 0 1	.....	28,355 0 1	
Raising private compounds in Khetwadi	25,336 2 1	.....	25,336 2 1	
Three branch drains in Khetwadi and storm-water entrances	31,711 15 6	.....	31,711 15 6	
Intercepting drain in Tardeo District and storm-water entrances	1,69,851 10 4	.....	1,69,851 10 4	
Making connection between low-level sewers and new main drains... ...	2,610 8 10	.....	2,610 8 10	
Intercepting drain from Pydhoni to Bellasis Road and storm-water entrances	3,03,229 3 9	.....	3,03,229 3 9	
Enlarging old open main drain ...	71,318 13 5	.....	71,318 13 5	
Laying a new 24" main and removing old 24" Tulsi main	74,226 14 0	.....	74,226 14 0	
C—Drainage Works—Carried over Rs.	11,49,993 6 1	.....	11,49,993 6 1	
Carried over Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
C—Drainage Works—Brought forward Rs.	11,49,993 6 1	.....	11,49,993 6 1	
Constructing storage reservoir on the Flats and raising levels of manholes and sewers	1,86,225 12 6	.....	1,86,225 12 6	
Establishment for Surface Drainage Works	1,21,413 0 0	.....	1,21,413 0 0	
Contingencies do. do. ...	63,627 6 11	.....	63,627 6 11	
Cleaning the Worli storm-water drain and widening the channels south of the Love Grove sluices	79,510 9 7	.....	79,510 9 7	
Main sewers	4,92,691 8 2	.....	4,92,691 8 2	
Pipe sewers	3,00,746 13 1	.....	3,00,746 13 1	
Outfall sewer	2,55,766 10 0	.....	2,55,766 10 0	
Kamatipura drainage	76,471 4 6	.....	76,471 4 6	
Clerk Road Ovoid sewer	39,259 5 11	.....	39,259 5 11	
Government Commission charges for drainage of 1878	5,211 15 9	.....	5,211 15 9	
Preliminary expenses in connection with the drainage of 1878	13,429 6 5	.....	13,429 6 5	
Departmental works in connection with the drainage of 1878	1,072 1 3	.....	1,072 1 3	
Compensation for land in connection with the drainage of 1878	18,831 11 1	.....	18,831 11 1	
Proportion of repairs to roads (opened for the works) in connection with the drainage of 1878	34,372 14 7	.....	34,372 14 7	
Miscellaneous charges in connection with the drainage of 1878	22,302 15 7	.....	22,302 15 7	
Establishment for works in connection with the drainage of 1878	1,45,000 0 0	.....	1,45,000 0 0	
Contingencies in connection with the drainage of 1878	51,167 7 9	.....	51,167 7 9	
Repairs to old Main Drain at Falkland Road	2,093 13 5	.....	2,093 13 5	
House connections without privy fittings	6,32,080 1 7	.....	6,32,080 1 7	
Shaft ventilators	44,947 0 6	.....	44,947 0 6	
Closing storm-water openings in Frere Road sewer	17,108 9 6	.....	17,108 9 6	
Queen's Road intercepting sewer ...	1,53,969 0 0	.....	1,53,969 0 0	
House connection survey ...	4,561 13 3	.....	4,561 13 3	
House connections, Kamatipura Drainage	34,977 7 5	.....	34,977 7 5	
Pipe sewer from Clare Road along south portion of Haines Road and DeLisle Road	1,14,260 0 7	.....	1,14,260 0 7	
Pipe sewer from Parel Workshop to Clerk Road Ovoid sewer	65,793 9 11	.....	65,793 9 11	
Extension of Clerk Road Ovoid sewer to Parel Road	35,569 8 0	.....	35,569 8 0	
Ovoid sewer across the Old Race-course.	59,746 13 2	.....	59,746 13 2	
Ovoid sewer from the Crawford Market down Hornby Road to Bazar Gate and thence to the Mint.. ...	89,401 11 9	.....	89,401 11 9	
Establishment charges for sanitary works of 1885-1886	1,25,178 0 0	.....	1,25,178 0 0	
Adjustment of the extra expenditure incurred on the Queen's Road intercepting sewer	9,633 10 8	.....	9,633 10 8	
Fort Drainage	3,68,422 5 9	.....	3,68,422 5 9	
New Works at Love Grove Pumping Station	34,645 9 6	.....	34,645 9 6	
Construction of a side drain along Wari Bunder Road	4,934 0 1	.....	4,934 0 1	
Construction of a pipe sewer in certain lanes in Khetwadi	5,282 6 0	.....	5,282 6 0	
Establishment charges for sanitary works of 1887 to 1888...	39,419 0 0	.....	39,419 0 0	
Queen's Road pipe sewer including contingencies	6,09,998 4 2	.....	6,09,998 4 2	
Queen's Road house connections	2,05,306 0 9	.....	2,05,306 0 9	
Establishment and contingencies for Queen's Road sewerage works ...	86,132 14 3	.....	86,132 14 3	
Extension of Parel Road storm-water drains from Bellasis Road to ⅓rds the length of Ripon Road	41,106 6 9	.....	41,106 6 9	
9" Pipe sewer along Bellasis Road, Foras Road and Gilder Street ..	17,290 8 1	.....	17,290 8 1	
C—Drainage Works—Carried over Rs....	58,58,953 0 3	.....	58,58,953 0 3	
Carried over Rs...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
C—Drainage Works, brought forward Rs.	58,58,953 0 3	.....	58,58,953 0 3	
House sullage water connections at Agripada	2,33,533 12 10	.....	2,33,533 12 10	
Sewer flushing arrangements	13,864 7 3	.....	13,864 7 3	
Pumps and steam engine for the working of the Love Grove Pumping Station	4,63,345 8 6	.....	4,63,345 8 6	
Sewerage of Colaba	7,56,419 0 0	.....	7,56,419 0 0	
Sewerage of Umarkhadi District ...	3,53,786 5 9	... ...	3,53,786 5 9	
Storm-water drains in Moreland, Souter, Club and Gilder Streets	79,644 0 2	.....	79,644 0 2	
Storm-water drains in different places .	56,724 2 11	.....	56,724 2 11	
Storm-water drains in Connaught and Sussex Roads	35,923 15 9	.....	35,923 15 9	
Miscellaneous extensions and improvements of drains	33,664 6 1	.....	33,664 6 1	
Sewerage of the Mazagon District on gravitation system	3,06,680 0 5	.....	3,06,680 0 5	
Sewerage of Malabar and Khamballa Hills on gravitation system	1,31,666 0 1	.....	1,31,666 0 1	
Sewerage of Fergusson Road and Chinchpokli District	89,829 8 5	.....	89,829 8 5	
Raising sewerage in Queen's Road sewer	1,862 0 0	.....	1,862 0 0	
Sewerage of Old Race-course District on gravitation system	39,039 8 1	.....	39,039 8 1	
Machinery for the sewerage of Parel, the Mazagon, &c., sectional districts.	7,35,520 6 0	.....	7,35,520 6 0	
Mazagon District, sectional	3,52,785 4 2	.....	3,52,785 4 2	
Storm-water drain from Wellington Fountain *via* Bandstand to the Sea...	36,778 4 2	.....	36,778 4 2	
Improvements in the roadside drains along Bhoiwada Cross Road and new side drains along portions of Dadar Road, &c.	29,856 14 11	.....	29,856 14 11	
Surface drainage of Kamatipura ...	83,440 9 2	.....	83,440 9 2	
Storm-water drain in Tardeo Road ...	1,56,542 11 3	.....	1,56,542 11 3	
Low-level Channel from the Tardeo Flats to Worli Point	11,83,726 0 0	.....	11,83,726 0 0	
Sewerage of the Fergusson Road and Chinchpokli District on the sectional system	2,56,782 14 6	.....	2,56,782 14 6	
Sewerage of the Parel District on the sectional system	4,66,272 3 7	.....	4,66,272 3 7	
Completion of house drainage connections in different parts of the City ...	9,38,638 15 6	35,593 11 7	9,74,232 11 1	
Difference in the cost of the works proposed by Mr. Santo Crimp in connection with the drainage of the lower parts of the City	1,44,176 13 9	.....	1,44,176 13 9	
(17) Catchpits on pipe sewers	26,994 14 0	.....	26,994 14 0	
(17) Catchpits on ovoid sewers... ...	43,165 13 4	.....	43,165 13 4	
Sewerage of the Malabar Hill District, sectional	6,39,948 0 0	.....	6,39,948 0 0	
Construction of a new outfall at Love Grove	17,30,457 15 6	4,47,183 7 0	21,77,641 6 6	
Sewerage of the Elphinstone Reclamation	2,05,999 10 11	.....	2,05,999 10 11	
Construction of storm-water drains in Marine Lines, from the northern end of the B. B. & C. I. Ry. Office to the junction of 1st Marine Lines ...	13,177 10 10	.....	13,177 10 10	
Providing an additional Pipe Sewer and Ejector in Fergusson Road near its junction at DeLisle Road (*North*).	70,071 10 9	.....	70,071 10 9	
Construction of a storm-water drain in Arthur Road from its junction with Kalachowki Road to Jacob Circle... ...	65,453 14 7	.....	65,453 14 7	
Extension of Low Level Channel No. 2 from DeLisle Road to Dadar Road ..	2,84,489 3 7	.....	2,84,489 3 7	
Constructing a storm-water drain in Colaba Causeway between Ormiston Street and Thomas Street	8,538 5 0	.....	8,538 5 0	
Construction of a storm-water drain in DeLisle Road (*North*)...	48,396 3 3	.....	48,396 3 3	
Provision of Ejectors in the Colaba Sub-District	1,08,804 6 10	.....	1,08,804 6 10	
C—Drainage Works—Carried over Rs.	1,60,84,954 10 1	4,82,777 2 7	1,65,67,731 12 8	
Carried over Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
C—Drainage Works, brought forward Rs....	1,60,84,954 10 1	4,82,777 2 7	1,65,67,731 12 8	
Construction of a storm-water drain in DeLisle Road (*South*)	15,257 13 3	.....	15,257 13 3	
Extending the existing storm-water drain and constructing water gullies and water tables in Mazagon Road...	4,921 11 1	.....	4,921 11 1	
Constructing a storm-water drain in New Purbhadevi Road	33,746 5 0	.....	33,746 5 0	
Constructing storm-water drains in Khetwadi Back Road	25,650 3 11	.....	25,650 3 11	
Constructing a storm-water drain in Queen's Road from Wodehouse Road Bridge to Bandstand	11,086 9 4	.....	11,086 9 4	
Constructing a storm-water drain in Mayo Road from Queen's Statue to Church Gate Street	9,192 11 8	.....	9,192 11 8	
Constructing a storm-water drain in DeLisle Road, north of Arthur Road.	44,502 3 0	.....	44,502 3 0	
Constructing a storm-water drain in Mayo Road from Church Gate Street to Bandstand	21,182 3 3	.....	21,182 3 3	
Measures for relieving the surcharging of sewers	17,05,190 11 0	5,944 8 3	17,11,135 3 3	
Construction of a storm-water drain from the junction of Reay and Connaught Roads to the Harbour near Lakri Bunder	5,56,937 3 7	.....	5,56,957 3 7	
Construction of a storm-water drain in DeLisle Road, south of Arthur Road.	29,371 15 10	.....	29,371 15 10	
Construction of a storm-water drain in Elphinstone Road, West	12,771 5 2	.....	12,771 5 2	
Construction of a storm-water drain in Ghorupdeo Road	17,354 2 3	.....	17,354 2 3	
Construction of a storm-water drain in Mugbhat Lane	8,021 15 6	.....	8,021 15 6	
Construction of an office for the Drainage Staff and quarters and an office for the Head Plumber at Babula Tank and providing fencing round the Drainage Chowki and metalling the yard	36,681 13 11	.....	36,681 13 11	
Construction of two new Drainage Chowkies at Bapty Road and Churney Road	13,083 15 6	.....	13,083 15 6	
Construction of a storm-water drain from the foot of Byculla Bridge to the junction of Connaught and Reay Roads	3,14,019 3 9	.....	3,14,019 3 9	
Construction of a storm-water drain in Soparibagh Road	2,12,956 7 6	.....	2,12,956 7 6	
Construction of a storm-water drain from the Junction of Connaught and Reay Roads to Kalachowki and Soparibagh Roads	6,93,299 6 6	.....	6,95,299 6 6	
Slab drain 18′ × 18″ in Store Lane, Homji Street	2,557 2 6	.....	2,557 2 6	
Pipe sewer in Currey Road	2,595 15 5	.....	2,595 15 5	
Main sewerage of Parel	22,121 7 8	.....	22,121 7 8	
Arching over with brick masonry the main drain at the Arthur Road Crossing...	15,655 0 4	.....	15,655 0 4	
9″ Pipe sewer at Lalwadi	2,087 8 2	.....	2,087 8 2	
Laying branch pipe sewers in the village f Parel	17,527 13 11	.....	17,527 13 11	
Ovoiding side-drains to the north of Kalachowki Road	2,600 4 3	.....	2,600 4 3	
Completing the storm-water drain from the top of Bazar Gate Street to the Salvation Army Hall, Hornby Road.	14,460 2 7	.....	14,460 2 7	
Sewerage of Parel on the gravitation system	62,081 1 5	.....	62,081 1 5	
Storm-water drain in Cruickshank Road	17,337 6 0	.....	17,337 6 0	
Laying a 9″ pipe for the carriage of storm water to the Sea from the eastern half of Wodehouse Road ...	1,992 1 3	.....	1,992 1 3	
Laying a 9″ pipe-line at the Parel village	878 7 3	.....	878 7 3	
C—Drainage Works—Carried over Rs. ...	2,00,14,077 1 10	4,88,721 10 10	2,05,02,798 12 8	
Carried over Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
C—Drainage Works, brought forward Rs.	2,00,14,077 1 10	4,88,721 10 10	2,05,02,798 12 8	
Storm-water drains in part of Gilder Street and Foras Road from Grant Road to Falkland Road	10,781 14 10	.....	10,781 14 10	
Constructing a catchpit on the Mint Road sewer opposite the European General Hospital	4,880 10 8	.....	4,880 10 8	
Altering and ovoiding storm-water drain in Girgaum	11,548 14 10	.....	11,548 14 10	
Construction of a storm-water drain in Khetwadi	52,662 2 8	.....	52,662 2 8	
Draining the storm-water from the public road round the Mahaluxmi Dhobiwada	1,156 0 3	.....	1,156 0 3	
Ovoiding and regrading the open road-side drains in Umarkhadi Road ...	3,119 0 11	.....	3,119 0 11	
Converting the old Engine-house at Love Grove into an office and godown and constructing a shred-lifter chamber with 4 shred lifters ..	25,031 4 1	.....	25,031 4 1	
Tidal flaps on flushing drains for ovoid sewers	2,235 4 4	.....	2,235 4 4	
Drainage arrangements at Tardeo Road	2,292 0 8	.....	2,292 0 8	
Laying a 9" pipe sewer in Fergusson Cross Road	2,261 14 9	.....	2,261 14 9	
Masonry drain from Girgaum Road and passing through Night-soil Depôt ...	21,317 6 7	.....	21,317 6 7	
Opening out the public water-course behind Mr. Cama's property at Parel Road	3,362 6 7	.....	3,362 6 7	
Laying a 12" pipe from the emergent reservoir to manhole in Apollo Street	3,169 7 8	.....	3,169 7 8	
Ovoiding and constructing masonry side-drains in different places... ...	17,895 11 11	.....	17,895 11 11	
Ovoiding and constructing masonry side-drains on Carroll Road, north side	2,711 3 3	.....	2,711 3 3	
Ovoiding kutcha drain in Arthur Road as far as G. I. P. Railway Crossing...	4,988 15 1	.....	4,988 15 1	
Constructing storm-water drains and ovoiding and constructing masonry side-drains in different places .	20,493 10 8	.....	20,493 10 8	
Automatic flush tanks on pipe sewers	38,454 0 10	.....	38,454 0 10	
Improving side-drains, Malabar Hill ...	7,672 13 6	.....	7,672 13 6	
Storm-water drains at Fergusson Road from DeLisle Road to the water-course (3,200 feet) west of the road...	29,964 4 9	.....	29,964 4 9	
Providing and constructing masonry side-drain in Malabar Hill	7,346 11 0	.....	7,346 11 0	
Providing and constructing masonry side-drains (*a*) on Naigaum Cross Road on both sides from Vincent Road to Dadar and (*b*) east and west of Ghorupdeo Road	5,239 5 6	.....	5,239 5 6	
Storm-water drain running on the west of the G. I. P. Railway Dadar Station	7,023 6 9	.....	7,023 6 9	
Constructing quarters for workmen at Love Grove Air Compressor Station (including purchase of land and an old chawl)	21,961 1 5	.....	21,961 1 5	
Constructing additional quarters for Lascars at Love Grove	5,477 9 6	.....	5,477 9 6	
Cutting out rocky barriers in the channel at Love Grove	116 6 0	.....	116 6 0	
Surface Drainage in Queen's Road between the level-crossing and Charni Road	2,807 15 0	.....	2,807 15 0	
Ovoiding and regrading the side-drain in Imamwada from Parel Road to Jail Road, North	2,089 3 10	.....	2,089 3 10	
Masonry storm-water drain 18" × 18" in Apollo Street	1,888 15 9	.....	1,888 15 9	
Open ovoid drain on the east side of DeLisle Road	1,567 14 10	.....	1,567 14 10	
Zinc ventshafts on pipe sewers in the Fort Sewerage District	11,165 8 9	.....	11,165 8 9	
Storm-water drain in Sankli Street ..	11,529 15 8	.....	11,529 15 8	
C—Drainage Works—Carried over Rs. ...	2,03,58,270 8 8	4,88,721 10 10	2,08,46,992 3 6	
Carried over Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	GRAND TOTAL.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs....	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
C—Drainage Works, brought forward Rs....	2,03,58,270 8 8	4,88,721 10 10	2,08,46,992 3 6	
Cost of obtaining advice from Mr. Santo Crimp, in regard to house connections, &c.	11,992 9 10	.....	11,992 9 10	
Construction of permanent manholes over drains	37,050 5 7	.....	37,050 5 7	
Masonry side-drains at Malabar Hill from Gowalia Tank Road to the Government House	7,805 4 2	.....	7,805 4 2	
Tidal flaps on the ovoid sewers ...	11,025 14 0	.....	11,025 14 0	
Construction of a coal shed, a coal tramway, and fence round the compound of the Love Grove Air Compressor Station	11,211 10 9	.....	11,211 10 9	
6" Pipe Drain in DeLisle Road ..	430 10 7	.....	430 10 7	
6" Pipe Drain in Banganga Cross Lane.	824 15 8	.....	824 15 8	
Extension of the 15" sealed sewage main in Fergusson Road from the Culvert to Worli Road	11,466 8 10	.....	11,466 8 10	
Laying a 6" pipe-drain in Talsirampada in Parel Chawl Road	1,051 12 0	.....	1,051 12 0	
Laying a 6" pipe drain in the private passage known as Kalachowki Cross Lane	602 14 7	.....	602 14 7	
6" Pipe drain in the passage to the north of Parel Cross Lane	472 10 3	.....	472 10 3	
Connecting certain properties in Gilder Street with the new storm-water drain constructed thereat	1,496 13 1	.....	1,496 13 1	
Laying a 9" stoneware pipe drain in a portion of Foras Road, west of Carroll Road	1,365 13 11	.....	1,365 13 11	
Laying a 6" pipe drain in the passage belonging to Sulleman Jusab at Belvedere Hill Road	647 8 2	.....	647 8 2	
Laying a 6" pipe drain in Bapty Road .	486 15 2	.....	486 15 2	
Laying a 9" pipe drain at Tank Bunder Koliwada	2,042 13 3	.....	2,042 13 3	
Construction of a catchpit on the Queen's Road ovoid sewer in Charni Road, &c.	6,202 0 4	.....	6,202 0 4	
Laying a drain at Mr. Tribhowandas Varjivandas' Oart at Girgaum Back Road	254 13 2	.....	254 13 2	
Storm-water drain in Ripon Road from Agripada drain to Jacob Circle ...	27,086 12 11	.....	27,086 12 11	
Storm-water drain in Clerk Road from Parel Road to Jacob Circle... ...	26,900 9 11	.....	26,900 9 11	
Storm-water drain in Haines Road from Khatao Makanji's Mill to Jacob Circle	48,844 13 3	.....	48,844 13 3	
Laying a branch 6" pipe sewer at De Lisle Road	761 3 7	.....	761 3 7	
Laying a 6" pipe drain at Ghorupdeo Road	404 6 3	.....	404 6 3	
Laying a 9" pipe sewer along Elphinstone Road at its Junction with Parbhadevi Road	1,112 5 3	.....	1,112 5 3	
Laying a 9" pipe drain with Inspection Chamber at the passage running through Chamarbag properties .	3,938 8 10	.....	3,938 8 10	
Laying a 6" pipe drain on the Tulsi main road	1,000 9 1	.....	1,000 9 1	
Laying a 6" pipe drain at Ghorupdeo Road, 1st Cross Lane	360 14 10	.....	360 14 10	
Constructing a storm-water drain at Kalachowki Road	789 2 3	.....	789 2 3	
Laying a 6" pipe drain along Chamarbag properties in Parel Road ...	1,166 0 8	.....	1,166 0 8	
Laying a pipe sewer between Forjett Street and Tardeo Road	2,409 10 2	.....	2,409 10 2	
Fees to Mr. Midgley Taylor on account of his report on the Ejector, &c., required for Sectional District ...	1,961 1 4	.....	1,961 1 4	
Establishment for the preparation of plans and estimates for the sewerage of Mazagon, Parel and Old Race Course Districts	10,338 0 0	.....	10,338 0 0	
C—Drainage Works—Carried over Rs. ...	2,05,91,776 12 4	4,88,721 10 10	2,10,80,498 7 2	
Carried over Rs. .	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ..	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
C—Drainage Works, brought forward Rs ...	2,05,91,776 12 4	4,88,721 10 10	2,10,80,498 7 2	
Tracing the plans and sections of the Parel, Mazagon and Old Race Course Districts	658 15 0	.....	658 15 0	
Fees to Messrs. Midgley Taylor and G. R. Strachan for their opinion on matters connected with the surcharging of sewers	16,796 13 4	.....	16,796 13 4	
Expenses incurred by Mr. James in connection with inquiries in regard to Lierner system, &c.	1,634 3 0	.....	1,634 3 0	
Construction of a storm-water drain in Church Gate Street from its junction with Mayo Road to the main storm-water drain in Queen's Road near the Church Gate Street ...	4,033 9 5	.....	4,033 9 5	
Laying a 6" pipe sewer in the passage opening to Portuguese Church Road	227 4 3	.....	227 4 3	
Laying a 6" pipe drain at Madanpura..	346 4 2	.....	346 4 2	
Extension of the 15" sealed sewage main from the Chinchpokli Fire Brigade Station to the head manhole on Clerk Road sewer	12,408 4 9	.....	12,408 4 9	
Constructing a storm-water drain in Colaba Causeway between Mayo Road and Thomas Street	8,973 9 11	.....	8,973 9 11	
Preparation of certain models for improvement of main sewers, &c. ...	200 0 0	.....	200 0 0	
Laying 6" pipe drain in the passage behind the New Building of Mr. Hormusji Vakil	5,226 13 4	.....	5,226 13 4	
Laying a 6" pipe drain in the passage leading to the Hon'ble Mr. Setalvad's Bungalow	1,244 3 6	.....	1,244 3 6	
Laying a 6" pipe drain in the Nepean Sea Road	1,243 11 7	.....	1,243 11 7	
Laying a 9" pipe drain at Elphinstone Road	6,761 10 9	.....	6,761 10 9	
Extending the existing 6" pipe drain in the passage off Dadar and Kumbharwada Cross Lane	33 7 10	.....	33 7 10	
Laying a 6" pipe drain in the passage at Currey Road	471 10 2	.....	471 10 2	
Laying a 9" pipe drain in the passage leading to Government Gate Road, Parel	2,139 0 6	.....	2,139 0 6	
Laying a 4" C. I. pipe drain from DeLisle Road to the boundary of the Century Mill premises	4,816 0 10	.....	4,816 0 10	
Providing an additional pipe sewer and Ejector in Fergusson Road near its junction at DeLisle Road (North)..	8,000 0 0	.....	8,000 0 0	
Laying a 6" pipe sewer in the passage near the Lunatic Asylum, Colaba ...	1,364 5 4	.....	1,364 5 4	
Laying a branch drain in the passage off Mount Pleasant Road ...	727 10 6	.....	727 10 6	
Laying a 6" pipe sewer at Banganga Tank Lane	929 8 9	.....	929 8 9	
Laying a 7" pipe drain on the eastern boundary of the Babula Tank ..	1,321 9 2	.....	1,321 9 2	
Laying a 6" pipe drain in Gowalia Tank Road	387 11 9	.....	387 11 9	
Laying a 6" pipe drain at Victoria Bunder Road	367 11 6	.....	367 11 6	
Laying a 6" pipe drain in Kamatipura 9th Street	562 1 2	.....	562 1 2	
Laying a 6" pipe drain in the lane behind No. 49-51, Warden Road ...	1,610 10 10	.....	1,610 10 10	
C—Drainage Works—Carried over Rs ...	2,06,74,263 11 8	4,88,721 10 10	2,11,62,985 6 6	
Carried over Rs. ..	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
C—Drainage Works, brought forward Rs.	2,06,74,263 11 8	4,88,721 10 10	2,11,62,985 6 6	
Giving street connections to storm-water drains in the City	42,389 15 5	4,351 12 1	46,741 11 6	
Laying a 6" pipe drain at Warden and Tardeo Roads	480 3 6	.....	480 3 6	
Laying a 6" pipe sewer in the compound of premises No. 14-20 to the east of Cumballa Hotel Lane .	615 3 7	.....	615 3 7	
Laying a 6" pipe drain in the passage leading to Khed Tank in the north of Elphinstone Road	1,027 11 3	.....	1,027 11 3	
Laying a 6" pipe drain in the passage to the east of Cumballa Hotel Lane.	834 6 2	.....	834 6 2	
Laying a 6" pipe drain at Nepean Sea Road	978 13 7	.....	978 13 7	
Colaba Sewerage Work	44,836 14 11	.....	44,836 14 11	
Sewerage of the Malabar Hill District	7,394 12 2	.....	7,394 12 2	
Laying a 4" air main in Victoria Extension Road from the junction of Victoria Road and Mount Road to Ejector Station No. 2, Mazagaon, in place of the existing 2½" C. I. main	4,320 0 2	.....	4,320 0 2	
Construction of a sealed sewage main from the Elphinstone Road Ejector Station to Worli Road	68,326 11 1	.....	68,326 11 1	
Constructing a masonry drain with four manholes and eight half-sized water entrances at DeLisle Road ...	6,351 8 10	.....	6,351 8 10	
Filling in the open side drains on both the sides and providing covered storm-water drains with water tables and water gullies in portions of 1st to 5th Khetwadi Lanes and Main Roads	7,431 11 8	.....	7,431 11 8	
Filling in old side drains and providing a covered drain with manholes, full sized and half-sized water entrances, with water tables on 14th Khetwadi Lane...	3,104 6 3	.....	3,104 6 3	
Providing storm-water drain with water entrances and water tables at 11th Khetwadi Lane	3,184 12 1	.....	3,184 12 1	
Constructing a road-side drain and providing a covered storm-water drain at Girgaum Back Road ...	12,952 13 9	.....	12,952 13 9	
Laying a 6" pipe drain on the West of Dadar Road	258 10 8	.....	258 10 8	
Laying a 9" pipe sewer between Charni Road and Khetwadi 11th Lane ...	1,639 3 1	.....	1,639 3 1	
Making three drainage connections to the storm-water drain in Hornby Road	238 0 10	.....	238 0 10	
Surface drainage of Dadar and Naigaum Roads	22,810 14 4	.....	22,810 14 4	
Providing new pattern storm-water entrances with cast-iron grating and frames	29,902 15 1	25,885 3 8	55,788 2 9	
Subsidiary works at the Love Grove New Pumping Station in connection with the measures for relieving the surcharging of sewers	1,00,456 5 7	.....	1,00,456 5 7	
Laying a 15" pipe sewer from the Wellington Fountain to the head manhole of the Mint Road ovoid sewer	26,707 6 10	.....	26,707 6 10	
Additions to and enlargement of existing sewers in connection with the duplication of Tansa main	8,91,098 1 9	1,327 3 5	8,92,425 5 2	
Sewerage of the north of the Island ...	2,733 1 1	60,591 12 7	63,324 13 8	
Laying a 12" & 9" stoneware pipe sewer in a passage off Elphinstone Road in the locality known as "Saitan Chauki" near Khed Tank ...	2,465 8 3	20,001 7 3	22,466 15 6	
Provision of a 1'" pipe sewer in a portion of Mahim District, a septic tank near the foreshore at Mori Road, Mahim, and a hopper near the foreshore at Mori Road	222 15 3	44,269 8 3	44,492 7 6	
C—Drainage Works—Carried over Rs. ...	2,19,56,426 14 10	6,45,148 10 1	2,26,01,575 8 11	
Carried over Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	1,87,07,937 4 1	13,75,540 2 10	2,00,83,477 6 11	2,00,83,477 6 11
Drainage Works, brought forward Rs...	2,19,56,426 14 10	6,45,148 10 1	2,26,01,575 8 11	
Constructing a storm-water drain 2'×2' with water entrances in Waudby Road and Napier Road from Ravelin Street to Hornby Road	21,879 14 0	.....	21,879 14 0	
Providing a 2' × 2' storm-water drain with half-sized water entrances and water tables at Currey Road... ...	8,564 14 9	15,173 8 6	23,738 7 3	
Regrading and covering the old drain from Foras Road to Falkland Road drain and constructing a storm-water drain 2'×2' in Annesley Road ...	14,310 3 1	218 10 3	14,528 13 4	
Providing a 4' circular storm-water drain in Parel Road from Chinchpokli Road to Connaught Road ..	1,134 8 4	45,177 11 7	46,312 3 11	
Providing a storm-water drain in Victoria Road from Mount Road to the east end of the Sas-oon Compound.	16,995 11 2	388 6 6	17,384 1 8	
Constructing a storm-water drain in Kalachowki Road and Parel Road .	83 9 9	1,495 10 5	1,579 4 2	
Laying a 6" pipe drain in a passage near Saitan Chowky at Khed Tank.	.....	425 5 8	425 5 8	
Victoria Garden Drainage Works for stopping the breeding of Mosquitoes.	.....	6,548 9 6	6,548 9 6	
Constructing storm-water drain 2'×2' × 6" in Thakurdwar Road between Queen's Road and Girgaum Road ..	.....	17,389 7 3	17,389 7 3	
Providing a covered Storm-water drain in Girgaum Road from New Wadi to Thakurdwar Road	.....	159 7 3	159 7 3	
Payment to Mr. G. Midgley Taylor for his advice on the following drainage schemes :—				
(1) New Storm-water Outfall at Worli together with pumping arrangements	.....	3,142 12 1	3,142 12 1	
(2) Additional Pumping Machinery at Love Grove Pumping Staton on account of the duplication of the Tansa Main.	.....	1,787 11 2	1,787 11 2	
(3) Initial advice on the question of a Storm-water Outfall at Worli	.....	3,929 13 2	3,929 13 2	
C—Drainage—Total Rs. ..	2,20,19,395 11 11	7,40,985 11 5	2,27,60,381 7 4	2,27,60,381 7 4
D—WATER WORKS—				
Vehar Lake (value of)	45,21,943 7 9	.....	45,21,943 7 9	
Tulsi Water Works	37,61,388 6 0	.....	37,61,388 6 0	
Vehar Outlet Tower	2,38,111 10 0	.....	2,38,111 10 0	
Service Reservoir at Bhandarwada ...	10,16,830 13 3	.....	10,16,830 13 3	
Tulsi gathering ground	94,500 0 0	.....	94,500 0 0	
Malabar Hill Reservoir	4,00,000 0 0	.....	4,00,000 0 0	
New hydrants, including cost of erection	20,876 7 1	.....	20,876 7 1	
Construction of a double-storeyed chawl for the Water Works staff and quarters for the Superintendent	29,182 3 3	.....	29,182 3 3	
Survey of new catch-water channels, &c.	7,838 4 1	.....	7,838 4 1	
Construction of filter beds at Vehar ...	1,04,433 15 11	.....	1,04,433 15 11	
Improvement of the water-supply of the outlying districts...	6,82,065 0 8	.....	6,82,065 0 8	
Raising the Tulsi dams	1,13,257 9 7	.....	1,13,257 9 7	
Providing additional catch-water channels at Vehar and Tulsi	91,794 0 6	.....	91,794 0 6	
Purchase of check meters for the prevention of waste of water ...	1,27,132 14 8	.....	1,27,132 14 8	
Enlarging different mains	1,03,130 8 6	.....	1,03,130 8 6	
Cost of new water mains from Nesbit Road to Babula Tank	15,000 0 0	.....	15,000 0 0	
Establishment charges	80,770 0 0	.....	80,770 0 0	
Portion of excess cost of Vehar Outlet Tower	31,675 6 3	.....	31,675 6 3	
Provision of turbine at the Malabar Hill Reservoir	2,282 0 0	.....	2,282 0 0	
Malabar Hill Reservoir (extra cost) ...	1,14,039 2 6	.....	1,14,039 2 6	
D—Water Works —Carried over Rs. ...	1,15,56,751 14 0	.....	1,15,56,751 14 0	
Carried over Rs. ...	4,07,27,333 0 0	21,16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3

Appendix No. 8 — *continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	4,07,27,333 0 0	21,16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3
D—Water Works, brought forward Rs. ...	1,15,56,751 14 0	.....	1,15,56,751 14 0	
Increasing and improving the distribution of the water-supply and providing higher levels, Tulsi District, with filtered water	20,211 8 4	.....	20,211 8 4	
18″ main in Frere Road from the Bhandarwada Reservoir to Carnac Road and 12″ main from Carnac Road to Mint	80,031 5 0	.....	80,031 5 0	
Concrete trench, waste weir, Vehar Lake	30,608 7 1	.....	30,608 7 1	
Mains in 14 streets west of Frere Road and other mains in various places. ...	59,275 1 8	.....	59,275 1 8	
Arthur Road connection works necessitated by the laying of the Tansa 27″ main	9,542 10 5	.....	9,542 10 5	
Deacon's meters	16,788 0 0	.....	16,788 0 0	
Providing an asphalt surface to the floor of the settling basin of the Malabar Hill Reservoir and other works in connection therewith ...	92,872 9 2	.....	92,872 9 2	
Pawai Water Works	6,14,984 6 9	*Cr.* 26,000 0 0	5,88,984 6 9	
Additional Water Mains	98,386 0 10	.....	98,386 0 10	
Extension of Tulsi Catch-water Channel	20,836 9 1	.....	20,836 9 1	
Tansa Water Works including cost of survey	1,49,35,503 15 0	.....	* 1,49,35,503 15 0	
Improvements of the outlet towers at Vehar and Tulsi	12,842 13 10	.....	12,842 13 10	
9″ main from Ghorupdeo Road to Jackeria Bunder Road and 6″ main from thence to Sewri Cemetery Road.	27,892 4 7	.....	27,892 4 7	
New mains in Reay Road, &c. ...	1,042 5 0	.....	1,042 5 0	
Main along Kalachowki Road from Parel Road to Ghorupdeo Road and along Reay Road from Kalachowki Road to Bhandarwada Reservoir ...	1,26,969 12 8	.....	1,26,969 12 8	
9″ service main connected at one end with the Bhandarwada Reservoir and at the other with the Sewri Road 12″ main and supplemented midway by a 9″ service main down Connaught Road ...	48,364 0 5	.....	48,364 0 5	
Extension of water mains in various places	28,026 6 5	.....	28,026 6 5	
Further alterations and improvements at the Malabar Hill Reservoir ...	29,971 14 8	.....	29,971 14 8	
Covering storage basin at the Bhandarwada Reservoir and constructing filters over it	91,052 13 0	.....	91,052 13 0	
Road from Vehar to Tulsi with a light tramway to carry pipes	471 3 6	.....	471 3 6	
9″ and 10″ pipes from Grant Road to Kamathipura	7,163 3 9	.....	7,163 3 9	
Distribution mains in Tardeo and Gamdevi Roads	7,391 5 2	.....	7,391 5 2	
Mains from 48″ Tansa main at Chinchpokli to Grant Road and 32″ main from Grant Road to Malabar Hill ...	2,10,000 0 0	.....	2,10,000 0 0	
32″ outlet mains from Malabar Hill to Chowpati	30,000 0 0	.....	30,000 0 0	
Construction of additional filters at the Malabar Hill Reservoir	2,45,319 9 2	.....	2,45,319 9 2	
Replacement of the Vehar main for the whole distance between Vehar and Coorla, north of Coorla	6,46,945 5 4	.....	6,46,945 5 4	
Removing and relaying the 32″ Vehar main, south of Coorla	5,17,726 14 7	.....	† 5,17,726 14 7	
9″ and 4″ mains in the new roads in the Agripada District	43,790 0 4	.....	43,790 0 4	
4″ main in New Street near Lohar Chawl	2,531 10 0	.....	2,531 10 0	
D—Water Works—Carried over Rs. ...	2,96,13,294 1 9	*Cr.* 26,000 0 0	2,95,87,294 1 9	
Carried over Rs. ...	4,07,27,333 0 0	21,16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3

* Inclusive of Rs. 2,40,000 paid out of the Premia received on the Loan.

† Inclusive of Rs. 3,74,000 paid from the contribution received from the G. I. P. Railway Co.

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a p.	Rs. a. p.	R. a. p.	Rs a. p.
Brought forward Rs. ...	4,07,27,333 0 0	21,16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3
D—Water Works, brought forward Rs. ...	2,96,13,294 1 9	*Cr.* 26,000 0 0	2,95,87,294 1 9	
Mains in the 1st Nagpada Scheme ...	6,731 6 1	.....	6,731 6 1	
4″ main along Wodehouse Road ...	2,426 2 11	.....	2,426 2 11	
4″ main in Saukli Street	1,140 11 7	.....	1,140 11 7	
4″ main in Connaught Road Estate ...	1,666 9 8	.....	1,666 9 8	
48″ Tansa main at Chinchpokli to Grant Road and 32″ main from Grant Road to Malabar Hill... ...	47,629 7 1	.....	47,629 7 1	
32″ outlet mains from Malabar Hill to Chowpati	15,922 14 6	.....	15,922 14 6	
Laying new water mains and fixing hydrants in the roads, "City Improvement Scheme No. IV"	30,743 12 5	.....	30,743 12 5	
Laying water mains in B Ward ...	1,17,921 12 8	.....	1,17,921 12 8	
Laying water mains on the Colaba Reclamation	36,269 2 0	.....	36,269 2 0	
Laying water mains in A Ward ...	1,20,996 13 1	.....	1,20,996 13 1	
Construction of quarters for Water Works Office Staff on the Babula Tank Site	1,650 10 3	.....	1,650 10 3	
Laying a 9″ main along Mount Road from its junction with Love Lane to the junction at Victoria Road and a 6″ main along Ghorupdeo Road to be joined to the 6″ main already laid in Albert Road	15,972 15 0	.....	15,972 15 0	
Laying an additional 5″ main on the 24″ main, somewhat north of Government House, Parel, to join the 4″ main in Lady Jamsetji Road.	13,094 10 0	.....	13,094 10 0	
Providing quarters and offices for Water Works Inspector in A, B, C, E, F Wards	240 0 0	791 7 2	1,031 7 2	
Tansa Reduplication and Auxiliary Works—				
Duplicating Syphons Nos. 1 to 7...	33,74,880 0 0	*Cr.* 1,477 4 2	33,73,402 11 10	
Do. Syphon No. 8 ...	29,68,335 0 0	*Cr.* 7,831 4 5	29,60,503 11 7	
Raising Tansa Dam	4,39,355 0 0	918 10 9	4,40,273 10 9	
Distributing mains in the City ...	4,54,002 4 10	24,705 6 4	4,78,707 11 2	
General expenses	61,527 6 3	195 1 5	61,722 7 8	
Laying a 5″ service main in Sandhurst Road	37,255 7 5	.....	37,255 7 5	
Laying a 14″ main in Parel Road north of Grant Road...	19,010 8 3	.....	19,010 8 3	
Substitution of an electrically driven Turbine pump for plunger pumps and construction of a water tower on the Malabar Hill Reservoir ...	41,047 3 10	.....	41,047 3 10	
Renewal of water mains in the Girgaum District for improvement of the water supply...	43,390 2 11	.....	43,390 2 11	
15″ water main from 24″ main in Bhoiwada to Elphinstone Road as far as new Parbhadevi Road and thence a 9″ main to the Century Mill	49,452 0 2	.....	49,452 0 2	
New mains in various places	28,803 1 1	.....	28,803 1 1	
Covering storage basin at the Bhandarwada Reservoir and constructing filters over it	44,597 14 4	.....	44,597 14 4	
Excess cost of Worli Road main ...	21,696 4 1	.....	21,696 4 1	
Residence of the Chief Inspector, Water Works, at Babula Tank Road, and rooms for 6 sluicemen	32,028 1 3	.....	32,028 1 3	
24″ and 27″ mains from Malabar Hill Reservoir to Frere Fountain, Fort ...	50,093 1 2	.....	50,093 1 2	
Connections at Chinchpokli between Tansa and Vehar mains	7,402 1 4	.....	7,402 1 4	
Laying water mains in Wellington Lines	4,397 9 5	.....	4,397 9 5	
Renewing 3″ main in B Ward with 4″ pipes—extra cost chargeable to Capital	4,533 3 4	.....	4,533 3 4	
Replacing 32″ Vehar pipes for 1¼ miles by 48″ C. I. pipes (north of Ceorla).	2,82,483 15 0	.....	2,82,483 15 0	
9″ main in DeLisle Road	9,819 6 1	.....	9,849 6 1	
4″ main in Khara Talao Road ..	2,774 11 7	.....	2,774 11 7	
D—Water Works.—Carried over Rs ...	3,80,02,615 7 4	*Cr* 8,97 14 11	3,79,93,917 8 5	
Carried over Rs.	4,07,27,333 0 0	21,16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	4,07,27,333 0 0	21.16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3
D—Water Works, brought forward Rs. ...	3,8 ,02,615 7 4	*Cr.* 8,697 14 11	3,79,93,917 8 5	
Providing the trunk water mains with Venturi water meters	23,000 0 0	.....	23,000 0 0	
Fixing Deacon's meters on the distributing mains...	20,445 4 8	.....	20,445 4 8	
Extending the existing 9" main in the Agripada District along Gilder Street to join the existing 32" main in Grant Road	11,904 13 6	.....	11,904 13 6	
Extending the existing 9" main in DeLisle Road to join with 15" main in Elphinstone Road... ...	8,983 12 0	.....	8,983 12 0	
Travelling expenses to an Inspector and a lascar for taking survey, &c., in connection with the storage reservoir and filter beds at Ghatkoper	35 0 6	.....	35 0 6	
Constructing office, quarters and store-rooms for W. W., G Ward, at DeLisle Road on the site of Foras Tank	19,415 3 11	.....	19,415 3 11	
Extending the 9" main laid along the bank of the drainage channel across the proposed Foras Road from the Century Mill to join the existing 9" main at Worli... ...	4,092 4 11	.....	4,092 4 11	
Constructing a Screening Tower at Vehar Lake	25,027 5 5	.....	25,027 5 5	
Construction of a terminal Service Reservoir at Kirol near Ghatkoper.	1,01,049 6 9	4,143 12 0	1,05,193 2 9	
Reservoir at Golanji Hill	.....	3,783 6 6	3,733 6 6	
Miscellaneous expenses in connection with the removal of the villages in the Tansa Catchment area. ...	.....	36 9 0	36 9 0	
Amount payable to the G. I. P. Railway as Municipal contribution towards the cost of extending the Tansa Main overbridge at Ghatkoper on account of the quadrupling of the Railway lines	.....	23,768 0 0	23,768 0 0	
Laying 9" & 5" mains on the estate of the City Improvement Trust between King's way and the G. I. P. Railway Dadar Station ...	.....	13,308 4 11	13,308 4 11	
Laying water mains in the new roads constructed by the City Improvement Trust in their Agripada Estates	.....	3,259 7 5	3,259 7 5	
Laying a 6" water main and provision of fire hydrants in Lady Hardinge Road	... ...	2,394 14 0	2,394 14 0	
	3,82,16,568 11 0	41,996 6 11	3,82,58,565 1 11	
Paid out of the Worn-out Water Mains Renewal Fund—				
Replacing 3" main in Arthur Road by a 6" main and to extend it so as to join the 6" main in Kalachowki Road	431 2 4	... ...	431 2 4	
Laying a 9" main along Mount Road from its junction with Love Lane to the junction at Victoria Road and a 6" main along Ghorupdeo Road to be joined to the 6" main already laid in Albert Road	6,446 14 1	.....	6,446 14 1	
Laying a 6" main in Matarpakhadi and a 12" main along Mazagon Road from Nesbit Lane to Mount Road	5,696 15 4	.....	5,696 15 4	
Worn-out Water Mains Renewal Fund—Carried over Rs.	12,574 15 9	.....	12,574 15 9	
D—Water Works.—Carried over Rs. ...	3,82,16,568 11 0	41,996 6 11	3,82,58,565 1 11	
Carried over Rs. ...	4,07,27,333 0 0	21,16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3

Appendix No. 8—*continued.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	4,07,27,333 0 0	21,16,525 14 3	4,28,43,858 14 3	4,28,43,858 14 3
D—Water Works—Brought forward Rs. ...	3,82,16,568 11 0	41,996 6 11	3,82,58,565 1 11	
Worn-out Water Mains Renewal Fund—Brought forward Rs. ...	12,574 15 9	.....	12,574 15 9	
Cost of renewing 3″ main in Worli Road with 9″ pipes (chargeable to revenue)	26,517 3 9	.....	26,517 3 9	
Replacing 3″ main in Zaoba's Oarts by a 4″ one	672 7 6	.....	672 7 6	
Mains in the 1st Nagpada Scheme ...	1,645 6 0	.....	1,645 6 0	
Replacing the 5″ main in Janjikar Street and 3″ and 4″ main in Old Hanuman Lane by a 6″ main ...	4,359 1 2	.....	4,359 1 2	
4″ main in New Street near Lohar Chawl	2,168 15 11	.....	2,168 15 11	
Replacing 3″ main in Foras Road by a 6″ main	3,427 0 0	.....	3,427 0 0	
Replacing the 3″ main in Chunam Kiln Road by a 5″ main	998 14 10	.....	998 14 10	
Replacing a 3″ water main in Mazagon Road by 5″ main, &c....	2,133 4 1	.....	2,133 4 1	
Laying water mains in A Ward ...	53,230 8 10	.....	53,230 8 10	
Laying water mains in B Ward ...	57,241 10 2	.....	57,241 10 2	
Replacing a 3″ water main in Mughbhat Cross Lane by a 5″ main ...	924 5 9	.....	924 5 9	
Laying 3″ main in Gunpowder Road to be replaced by a 5″ main, &c., &c	1,730 5 8	.....	1,730 5 8	
6″ Water main in Soparibag Road from the Junction of Parel Govt. Gate Road with Elphinstone Road ...	8,838 15 3	.....	8,838 15 3	
Laying a 9″ main in Cawasji Patel Street	2,817 1 10	.....	2,817 1 10	
Replacing 3″ main in Huzria Street by a 5″ main	1,141 9 8	.....	1,141 9 8	
Laying 3″ and 4″ mains in Kamatipura Bazar Road by a 6″ main ...	2,447 1 6	.....	2,447 1 6	
Replacing 3″ water main in the Mahomedan Street at Ripon Road by a 5″ main	1,266 1 4	.....	1,266 1 4	
Replacing 3″ main in Bapu Khote Street by a 5″ main	1,136 8 0	.....	1,136 8 0	
Replacing the 3″ pipe in Arthur Road by a 6″ one and extending it so as to join the 6″ main in Kalachowki Road	551 2 8	.....	551 2 8	
Laying a 12″ main from the Tulsi Pipe line to Worli Road in place of the 6″ main in Fergusson Road ...	4,146 5 6	.....	4,146 5 6	
Laying a 5″ water main in place of the existing 3″ main in Fanaswadi.	1,352 1 0	.....	1,352 1 0	
Laying a 5″ main in Tank Street ...	1,579 0 7	.....	1,579 0 7	
Laying a 4″ main in Sheik Burhan Street	329 1 11	.....	329 1 11	
Replacing 4″ main by a 6″ main in Love Lane	2,318 9 8	.....	2,318 9 8	
Replacing small service mains in various parts of the City	8,715 9 3	.....	8,715 9 3	
Laying 5″ main in Vithoba Lane ...	365 0 1	.....	365 0 1	
Laying 5″ main in Temker Street ...	1,830 10 11	.....	1,830 10 11	
Replacing 3″ main in Kika Street by a 5″ one	2,402 6 0	.....	2,402 6 0	
Replacing 3″ main by a 5″ main in Guzar Street	966 15 5	.....	966 15 5	
Laying 5″ main in Undria Street ..	1,751 1 9	.....	1,751 1 9	
	2,11,579 9 9	.....	2,11,579 9 9	
D—Water Works—Total Rs. ...	3,84,28,148 4 9	41,996 6 11	3,84,70,144 11 8	3,84,70,144 11 8
Carried over Rs. ...	7,91,55,481 4 9	21,58,522 5 2	8,13,14,003 9 11	8,13,14,003 9 11

Appendix No. 8—*concluded.*

	Capital Expenditure upto 31st March 1918.	Expended during the year.	Total Capital Expenditure upto 31st March 1919.	Grand Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Brought forward Rs. ...	7,91,55,481 4 9	21,58,522 5 2	8,13,14,003 9 11	8,13,14,003 9 11
E—Cemeteries (*Burning and Burial Grounds*)—				
Burial ground for Mahomedans and Beni-Israels	2,11,652 4 5	.....	2,11,652 4 5	
Purchase of two sites of land for burning and burial grounds at Mahim and Worli, including cost of enclosure walls, &c.	47,680 4 4	.....	47,680 4 4	
Purchase of land from Mr. Ashburner for extension of burial ground for Mahomedans	1,17,046 0 6	.....	1,17,046 0 6	
Purchase of land in Narielwadi for future extension of burial ground for Mahomedans	1,60,577 5 10	.....	1,60,577 5 10	
Extension of burial ground at the Sewri Cemetery	71,640 9 8	.....	71,640 9 8	
Providing a burial ground at Haines Road for the Portuguese Community	26,949 12 7	.....	26,949 12 7	
Providing a burial ground for Mahomedans in F and G Wards at Antop Hill, Matunga	25,981 11 5	.....	25,981 11 5	
Extension of the Sewri Cemetery ...	40,902 9 6	475 5 3	41,377 14 9	
Filling in the portion of the Haines Road Cemetery	10,000 0 0	.....	10,000 0 0	
Providing a boundary wall at the Haines Road Cemetery	13,278 9 6	.....	13,278 9 6	
Acquisition of land required for the extension of the Hindu Burial Ground at Mahim	20,094 14 9	.....	20,094 14 9	
Filling in the Roman Catholic Cemetery at Haines Road and acquisition of land therefor including compound wall, drainage arrangements, &c.	9,269 10 7	53,058 5 7	62,328 0 2	
E—Cemeteries—Total Rs. ...	7,55,073 13 1	53,533 10 10	8,08,607 7 11	8,08,607 7 11
F—Disposal of Town Sweepings—				
Purchase of land on the Flats required for the disposal of Town sweepings.	1,98,913 8 8	.....	1,98,913 8 8	
Purchase of land on the Flats for the deposit of kutchra	5,890 14 1	.....	5,890 14 1	
Disposal of Town sweepings at Deonar.	7,84,000 0 0	.....	7,84,000 0 0	
Extra cost of the scheme for the disposal of Town Sweepings at Deonar	53,619 13 4	.....	53,619 13 4	
20 additional wagons for the disposal of Town sweepings ...	38,684 2 0	.....	38,684 2 0	
Construction of 10 new kutchra wagons required for the Health Department.	.....	35,985 2 0	35,985 2 0	
F—Disposal of Town Sweepings—Total Rs.	10,81,108 6 1	35,985 2 0	11,17,093 8 1	11,17,093 8 1
G—Miscellaneous—				
Purchase of land for the site of the Petit Hall and other charges in connection therewith	4,446 8 6	500 0 0	4,946 8 6	
Filling in the Babula Tank with debris.	58,857 15 9	.....	58,857 15 9	
Filling in Gowalia Tank and making Roads, &c., thereon	1,52,949 11 1	.....	1,52,949 11 1	
Filling in Matarpakhadi Tank at Mount Road	2,607 5 8	.....	2,607 5 8	
Filling in Gilder Tank	15,488 9 4	.....	15,488 9 4	
Filling in the portion of the old water-course situated at the north corner of the Foras Tank and west of Purbhadevi Night-soil Depôt in DeLisle Road	3,506 5 7	.....	3,506 5 7	
Laying out a new park at the site of the old Bhatia Baug	21,511 3 7	.....	21,511 3 7	
G—Miscellaneous—Total Rs. ...	2,59,367 11 6	500 0 0	2,59,867 11 6	2,59,867 11 6
Grand Total Rs. ...	8,12,51,031 3 5	*22,18,541 2 0	8,34,99,572 5 5	8,34,99,572 5 5

*Financed as follows:—

	Rs. a. p.
From Loan Capital	22,10,033 8 0
„ Contribution for Primary Schools from Government	38,507 10 0
Total Rs.	22,48,541 2 0

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

Appendix

STATEMENT of Outstanding Loans due by the Municipality and

No.	Particulars of Loans.	Rate of Interest.	Balance due on 1st April 1918.	Amount raised in 1918-19.	Total.	Amount re-paid in 1918-19.	Balance due on 31st March 1919.
	1	2	3	4	5	6	7
			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Loan raised from Government.						
1	Vehar Water Works Debt	4 per cent. ...	21,37,633 9 9	.....	21,37,633 9 9	28,994 14 0	21,08,638 11 9
	Loans raised from the Public.						
1	Drainage Loan of 1878 (Rs. 26,94,000)	5 per cent. ...	2,60,500 0 0	.....	2,60,500 0 0	(a) 2,08,000 0 0	52,500 0 0
2	The Sanitary Works Loan of 1885-86 (Rs. 44 Lakhs)	5 per cent. ...	37,39,000 0 0	.....	37,39,000 0 0	(b)	37,39,000 0 0
3	The Sanitary Works Loan of 1888 (Rs. 7 Lakhs)	5 per cent. ...	7,00,000 0 0	.....	7,00,000 0 0	(b)	7,00,000 0 0
4	The Tansa Water Works Loan (Rs. 147 Lakhs)	5 per cent. ...	1,47,00,000 0 0	.....	1,47,00,000 0 0	(b)	1,47,00,000 0 0
5	The Drainage and Water Works Loan of 1888 (Rs. 12 Lakhs) ...	5 per cent. ...	12,00,000 0 0	.....	12,00,000 0 0	(b)	12,00,000 0 0
6	The Miscellaneous Works Loan of 1888-89 for Drainage and Water Works, Markets and Roads (Rs. 10,08,500)	5 per cent. ...	10,08,500 0 0	.....	10,08,500 0 0	(b)	10,08,500 0 0
7	The Agripada House Sullage Water Connections Loan of 1889-90 of Rs. 2,48,000	5 per cent. ...	2,48,000 0 0	.....	2,48,000 0 0	(b)	2,48,000 0 0
8	The 35 Lakhs various Sanitary Works Loan of 1890-91	5 per cent. ...	35,00,000 0 0	.....	35,00,000 0 0	(b)	35,00,000 0 0
9	The Municipal Office Building Loan of 1891 (Rs. 8 Lakhs)	5 per cent. ...	8,00,000 0 0	.....	8,00,000 0 0	(b)	8,00,000 0 0
10	The Loan of 4½ Lakhs for Fire Brigade Quarters and Stations ...	4 per cent. ...	4,50,000 0 0	.....	4,50,000 0 0	(b)	4,50,000 0 0
11	The Loan of 42 Lakhs for repayment of the Balance of the 4½ per cent. Government Consolidated Loan	4 per cent. ...	42,00,000 0 0	.....	42,00,000 0 0	(b)	42,00,000 0 0
12	The Loan of 23¼ Lakhs for Drainage and other Works	4 per cent. ...	23,25,000 0 0	.....	23,25,000 0 0	(b)	23,25,000 0 0
13	The Loan of 15¾ Lakhs for Sewerage, Wari Bunder, &c., Road-, Burial Ground and certain Water Works (1st instalment of Rs. 10 Lakhs)	3½ per cent. ...	15,75,000 0 0	.....	15,75,000 0 0	(b)	15,75,000 0 0
	Do. do. (2nd instalment of Rs. 5¾ Lakhs)...	4 per cent. ...					
14	25 Lakhs Loan for Sewerage, Water and other Sanitary Works ...	4 per cent. ...	25,00,000 0 0	.....	25,00,000 0 0	(b)	25,00,000 0 0
15	20 Lakhs Loan for Plague purposes..	4 per cent. ...	20,00,000 0 0	.....	20,00,000 0 0	(b)	20,00,000 0 0
16	19¼ Lakhs Loan for Sewerage, Roads and other Sanitary Works..	4 per cent. ...	19,25,000 0 0	.....	19,25,000 0 0	(b)	19,25,000 0 0
17	24¾ Lakhs Loan for certain Sewerage and Water Works	4 per cent. ...	24,75,000 0 0	.....	24,75,000 0 0	(b)	24,75,000 0 0
18	12¾ Lakhs Loan for certain Water Works	4 per cent. ...	12,75,000 0 0	.....	12,75,000 0 0	(b)	12,75,000 0 0
19	The 2nd 24¾ Lakhs Loan for certain Sewerage Works	4 per cent. ...	24,75,000 0 0	.....	24,75,000 0 0	(b)	24,75,000 0 0
20	13½ Lakhs Loan for the construction of quarters for Halalkhores and Biggaries	4 per cent. ...	13,50,000 0 0	.....	13,50,000 0 0	(b)	13,50,000 0 0
21	The 15 Lakhs Loan for Street Improvements	4 per cent. ..	15,00,000 0 0	.....	15,00,000 0 0	(b)	15,00,000 0 0
22	The 30 Lakhs Loan for the acquisition of sites for the construction of different Overbridges in the City	4 per cent. ..	30,00,000 0 0	.....	30,00,000 0 0	(b)	30,00,000 0 0
23	The 55 Lakhs Loan for Drainage, Sanitary, Water and other Miscellaneous Works	4 per cent. ..	55,00,000 0 0	.....	55,00,000 0 0	(b)	55,00,000 0 0
24	The 70 Lakhs Loan for re-duplication of Tansa Main and other Auxiliary Works	4 per cent. ..	70,00,000 0 0	.....	70,00,000 0 0	(b)	70,00,000 0 0
25	The 20 Lakhs Loan for Street Improvements	4 per cent. & extra ¾ „ „ on Rs. 14 Lakhs	20,00,000 0 0	.....	20,00,000 0 0	.....	20,00,000 0 0
26	The 43 Lakhs Loan for Drainage, Water, Roads and Miscellaneous Works,	4 per cent & extra ¾ „ „ on Rs. 26 Lakhs	43,00,000 0 0	.....	43,00,000 0 0	.....	43,00,000 0 0
27	12 month's wide Loan of 30 Laks borrowed from the Bank of Bombay.		.....	30,00,000 0 0	30,00,000 0 0	.....	30,00,000 0 0
	Total of Loans raised from the Public ..	Rs. ...	7,20,06,000 0 0	30,00,000 0 0	7,50,06,000 0 0	2,08,000 0 0	7,47,98,000 0 0
	GRAND TOTAL ...	Rs. ..	7,41,43,633 9 9	.. ..	7,71,43,633 9 9	2,36,994 14 0	7,69,06,638 11 9

D. ROBERTSON,

Acting Chief Accountant.

No. 9.

the sums set aside as Sinking Fund at 31st March 1919.

Interest paid in 1918-19.	Total of columns Nos. 6 and 8.	Remarks.
8	9	
Rs. a. p.	Rs. a. p.	
84,981 2 0	1,13,976 0 0	(a) The amounts stipulated to be paid off on 1st January 1919 was Rs. 1,50,000, which, together with unpaid debentures aggregating Rs. 1,10,500 for the preceding years, aggregated Rs. 2,60,500 against which the debentures actually surrendered for payment up to 31st March 1919 amounted to Rs. 2,08,000. The unpaid balance thus amounts to Rs. 52,500 which is represented by the following debentures:— No. 2368 for Rs. 500 repayable on 1st January 1906, Nos. 2780 to 2788, 2804 to 2815 for Rs. 500 each, repayable on 1st January 1909, No. 2984 repayable on 1st January 1910, No. 3386 repayable on 1st January 1912, Nos. 4083 to 4086 and 4246 to 4249 for Rs. 500 each, repayable on 1st January 1915, Nos. 4499 to 4508 for Rs. 500 each repayable on 1st January 1916, Nos. 4553 to 4556 and 4592, for Rs. 500 each repayable on 1st January 1917, Nos. 4855 to 4864, and 4891 for Rs. 500 each repayable on 1st January 1918, Nos. 5296 to 5297, 5302 to 5303, 5314 to 5317 5326 to 5327, 5379, and 5347 to 5376 for Rs. 500 each, repayable on 1st January 1919. The unpaid debentures do not carry interest beyond the due date and will be repaid from the renewed grant when the holders apply for payment.
		(b) As under the terms of these Loans the bonds cannot be repaid to the holders before the dates stipulated in the debentures, the Sinking Fund has been invested as under:—

	Amount of Sinking Fund invested upto 31st March 1918.	Sinking Fund Instalments paid in 1918-19.	Interest accumulations invested in 1918-19.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
I.—5 per cent. Loans.				
9,912 8 0 — 2,17,912 8 0 — 44 Lakhs Sanitary Works Loan	25,04,858 15 11	41,278 8 5	1,05,371 4 9	26,51,508 13 1
7 Do. do. do. do.	4,11,830 13 7	8,310 10 9	16,914 10 0	4,37,056 2 4
1,94,400 0 0 — 1,94,400 0 0 — 147 Do. Tansa Water Works Loan	23,63,696 15 4	64,842 7 5	95,682 1 3	25,24,221 8 0
12 Do. Drainage and Water Works Loan	7,19,809 3 9	12,724 14 8	29,855 15 1	7,62,390 1 6
35,262 8 0 — 35,262 8 0 — Rs. 10,08,500 Miscellaneous Works Loan	5,65,705 1 6	11,429 1 7	23,317 5 1	6,00,451 8 2
Rs. 2,48,000 Agripada House Sullage Water Connections Loan	1,37,853 4 1	2,679 9 9	56,72 5 9	1,46,205 3 7
7,51,575 0 0 — 7,51,575 0 0 — 35 Lakhs Various Sanitary Works Loan	17,50,791 15 11	43,214 8 11	71,751 4 2	18,65,787 13 0
60,525 0 0 — 60,525 0 0 — 8 Do. Municipal Office Building Loan	3,83,639 6 6	9,057 7 11	15,685 1 11	4,08,382 0 4
Total I ...	88,88,185 12 7	1,93,067 5 5	3,64,250 0 0	93,95,503 2 0
		5,57,317 5 5		
51,562 8 0 — 51,562 8 0 — In 5 and 4 per cent. Municipal and 4 per cent. Improvement Trust Debentures and in 4 per cent. Govt Paper at par lodged with the Bank of Bombay	88,88,000 0 0	5,57,500 0 0		93,95,500 0 0
14,412 8 0 — 14,412 8 0 — Cash deposited with the Bank of Bombay	185 12 7	— 182 10 7		3 2 0
1,79,637 8 0 — 1,79,637 8 0 —				
II.—4 per cent. Loans. (3½ per cent. basis).				
40,000 0 0 — 40,000 0 0 —				
17,280 0 0 — 17,280 0 0 — 4½ Lakhs Fire Brigade Quarters and Stations Loan...	3,37,979 6 5	8,388 10 11	12,576 6 4	3,58,894 7 8
42 Lakhs Loan for repayment of Balance of Government Consolidated Loan	80,22,458 5 1	81 380 0 0	1,13,258 13 8	82,17,097 2 9
23½ Lakhs Loan for Drainage and other Works ...	8,88,981 10 9	27,481 12 1	32,729 15 9	9,48,293 6 7
1,79,020 0 0 — 1,79,020 0 0 — 15½ Lakhs Loan for Sewerage, Wari Bunder, &c., Roads, Burial Ground and Certain Water Works (2nd instalment)	2,12,196 3 2	7,268 11 8	8,306 5 2	2,27,771 4 0
92,960 0 0 — 92,960 0 0 — 25 Lakhs Loan for Sewerage, Water, &c., Works ...	7,17,511 14 3	29,247 6 8	26,194 5 11	7,72,953 10 10
20 Lakhs Loan for Plague purposes	16,51,843 2 5	69,618 13 1	61,106 9 7	17,82,568 9 1
19½ Lakhs Loan for Sewerage, Roads and other Sanitary Works...	5,21,128 4 2	22.115 5 1	19,267 12 2	5,62,511 5 5
24¾ Lakhs Loan for Sewerage and Water Works ...	5,22.197 3 4	28,626 1 11	19,083 11 7	5,69,907 0 10
12¾ Lakhs Loan for certain Water Works	4,03,217 3 0	21,415 4 8	14,541 0 2	4,42,173 7 10
60,742 8 0 — 60,742 8 0 — 2nd 24¾ Lakhs Loan for Sewerage Works	The Sinking Fund of this Loan is shown under a separate head below it having been decided that the investments should be in a 3 per cent. basis.			
99,620 0 0 — 99,620 0 0 —				
80,630 0 0 — 80,630 0 0 — Total II ...	82,76,613 4 7	2,98,492 2 1	3,07,965 0 4	88,82,170 7 0
		6,05,457 2 5		
73,550 0 0 — 73,550 0 0 — In 4 per cent. Municipal and Improvement Trust Debentures and Bombay Port Trust and in 5½ per cent. Indian War Bonds lodged with the Bank of Bombay	82,76,463 2 0	6,05,400 0 0		88,81 868 2 0
98,980 0 0 — 98,980 0 0 —				
58,600 0 0 — 58,600 0 0 — Cash deposited with the Bank of Bombay	145 2 7	+ 157 2 5		302 5 0
1,05,980 0 0 — 1,05,980 0 0 —				
III.—4 per cent. Loans (3 per cent. basis).				
51,360 0 0 — 51,360 0 0 — 2nd 24¾ Lakhs Loan for Sewerage Works	4,28,284 0 6	32,674 2 10	12,995 2 6	4,73,953 5 10
13½ Lakhs Loan for the construction of quarters for Halalkhores and Biggaries	2,92,180 8 0	28,265 6 9	9,293 2 7	3,29,739 1 4
58,680 0 0 — 58,680 0 0 — 15 Lakhs Loan for Street Improvements	1,79,322 11 10	19,821 15 2	5,740 14 8	2,04,885 9 8
30 Lakhs Loan for acquisition of sites for Overbridges	3,54,633 6 6	39,027 11 1	11,350 13 4	4,05,011 14 11
55 Lakhs Loan for Drainage, Sanitary, Water and other Miscellaneous Works	5,13,778 5 11	1,19,727 15 7	16,996 2 5	6,50,502 7 11
1,14,529 15 1 — 1,14,529 15 1 — 70 Lakhs Loan for re-duplication of Tansa Main and other auxiliary works	2,44,831 9 3	76,976 5 1	8,333 0 4	3,30,140 14 8
20 Lakhs Loan for Street Improvements ...	54,679 8 9	26,505 5 0	2,059 6 8	83,244 4 5
2,20,020 0 0 — 2,20,020 0 0 — 43 Lakhs Loan for Drainage, Water, Roads and Miscellaneous Work	1,86,321 2 6	90,319 0 7	7,017 9 6	2,83,657 12 7
2,75,332 4 10 — 2,75,332 4 10 — Total III ...	22,54,031 5 3	4,33,317 14 1	73,786 4 0	27,61,135 7 4
		5,07,104 2 1		
78,970 0 0 — 78,970 0 0 — In 4 per cent. Municipal Debentures lodged with the Bank of Bombay	22,54,000 0 0	5,07,000 0 0		27,61,000 0 0
1,88,298 7 0 — 1,88,298 7 0 — Cash deposited with the Bank of Bombay	31 5 3	+ 104 2 1		135 7 4
IV —3½ per cent. Loans.				
.... — 15½ Lakhs Loan for Sewerage, Wari Bunder, &c., Roads, Burial Ground and certain Water Works (1st instalment)	3,57,456 12 0	10,810 6 0	12,897 8 0	3,81,164 10 0
31,91,840 10 11 — 33,99,840 10 11 —		23,707 14 0		
In 4 per cent. Improvement Trust Debentures lodged with the Bank of Bombay	3,57,201 9 0	23,500 0 0		3 80,701 9 0
Cash deposited with the Bank of Bombay	255 3 0	+ 207 14 0		463 1 0
32,76,821 12 11 — 35,13,816 10 11 — GRAND TOTAL I, II, III and IV ...	1,97,26,287 2 5	9,35,687 11 7	7,57,998 12 4	2,14,19,973 10 4

P. W. MONIE,
Municipal Commissioner.

Appendix

SINKING

STATEMENT showing the Actual Investments on account of the Sinking Fund of Different that date on the basis

NAME OF LOAN.	Amount raised.	When repayable.	Amount of Annual Sinking Fund Instalment.	Date when Sinking Fund commenced.
1	2	3	4	5
	Rs.	Rs.	Rs.	
5 per cent. Municipal Loans.			†	
44 Lakhs Sanitary Works Loan ...	44,00,000	1st July 1886 7,000 1st „ 1887 4,43,000 1st „ 1890 51,000 1st „ 1895 1,60,000 1st „ 1925 37,39,000	41,872	..... *
7 Lakhs Sanitary Works Loan	7,00,000	1st February 1928 ...	8,170	1st February 1889...
147 Lakhs Tansa Water Works Loan ...	1,47,00,000	(*a*) Between 1st January 1928 and 1st Jan. 1953.	66,040	1st January 1893 ...
12 Lakhs Drainage and Water Works Loan.	12,00,000	1st January 1928 ...	(*b*) 12,616	1st January 1889 ...
Rs. 10,08,500 Miscellaneous Works Loan.	10,08,500	1st October 1928 ...	11,940	1st October 1889 ...
Rs. 2,48,000 Agripada House Sullage Water Connections Loan.	2,48,000	1st July 1929 ...	2,659	1st January 1891 ...
35 Lakhs various Sanitary Works Loan.	35,00,000	1st July 1930 ...	43,061	1st July 1891 ...
8 Lakhs Municipal Office Building Loan.	8,00,000	1st July 1931 ...	9,293	1st July 1892 ...
4 per cent. and 3½ per cent. Municipal Loans (3½ per cent. basis.)				
4½ Lakhs Fire Brigade Quarters and Stations Loan.	4,50,000	1st January 1923 ...	8,570	1st January 1894 ...
42 Lakhs Loan for the repayment of the balance of Government Consolidated Loan.	42,00,000	1st July 1923 ...	80,678	1st July 1894 ...
28½ Lakhs Loan for Drainage and other Works.	23,25,000	1st July 1935 ...	27,467	1st July 1896 ...
15¾ Lakhs Loan for Sewerage, Wari Bunder, etc., Roads, Burial Ground and certain Water Works—				
1st Instalment	10,00,000 raised at 3½ per cent.	1st July 1936 ...	(*c*) 11,147	1st July 1897 ...
2nd do.	5,75,000 raised at 4 per cent.		7,286	
25 Lakhs Loan for Sewerage, Water, etc., Works.	25,00,000	1st November 1939 ...	29,535	1st November 1900.
20 Lakhs Loan for Plague purposes ...	20,00,000	1st May 1920 ...	70,482	1st May 1901 ...
19½ Lakhs Loan for Sewerage Roads and other Sanitary Works.	19,25,000	1st June 1940 ...	22,698	1st June 1901 ...
24¾ Lakhs Loan for certain Sewerage and Water Works.	24,75,000	1st June 1943 ...	29,286	1st June 1904 ...
12¾ Lakhs Loan for certain Water Works.	12,75,000	1st August 1934 ...	24,698	1st August 1905 ...
4 per cent. Municipal Loans (3 per cent. basis)				
2nd 24¾ Lakhs Loan for Sewerage Works.	24,75,000	1st August 1946 ...	32,823	1st August 1907 ...
13½ Lakhs Loan for the construction of Quarters for Halalkhores and Biggaries.	13,50,000	1st May 1938 ...	28,376	1st May 1909 ...
15 Lakhs Loan for Street Improvements.	15,00,000	1st May 1949 ...	19,893	1st May 1910 ...
30 Lakhs Loan for the acquisition of sites, for the construction of various overbridges in the City.	30,00,000	1st May 1949 ...	39,787	1st November 1910.
55 Lakhs Loan for Miscellaneous Works.	55,00,000	1st June 1942 ...	1,21,632	1st June 1914 ...
70 Lakhs Loan for reduplication of Tansa Main and other auxiliary works.	70,00,000	.....	78,148	1st June 1915 ...
20 Lakhs Loan for Streets Improvements.	20,00,000	1st May 1955 ...	26,524	1st May 1916 ...
43 Lakhs Loan for Drainage, Water and Miscellaneous Works.	43,00,000	1st May 1945 ...	90,382	1st May 1916 ...
				Total Rs. ...

¶ Rs. 49,40,000 repayable on 1st June 1954.
„ 20,60,000 „ „ 1st June 1974.

Rs. 70,00,000

D. ROBERTSON,
Acting Chief Accountant.

No. 10.

FUND.

Loans up to 31st March 1919, compared with the amounts which should have accumulated up to of the Fixed Instalments.

Amount of Sinking Fund which should have accumulated up to 31st March 1919 at Compound Interest.	Amount actually invested up to 31st March 1919.	Amount of Interest due up to 31st March 1919 collected and invested in 1919-20.	Total of Columns 7 and 8.	Remarks.
6	7	8	9	10
Rs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	† All the Sinking Fund Instalments were re-arranged during 1906-07 on a 3½ per cent. basis as per Corporation Resolution No. 4946 of 9th February 1905.
27,09,714	26,51,508 13 1	53,330 14 2	27,04,839 11 3	* As Rs. 6,61,000 of this Loan were paid off by 31st December 1895, leaving a balance of Rs. 37,39,000 repayable on 1st July 1925, and as the Invested Sinking Fund on 31st March 1896 amounted to Rs. 4,51,047-15-5, the amount of the Annual Sinking Fund Instalment was reduced from Rs 37,000 to Rs. 30,550 from 1st January 1897.
4,39,735	4,37,056 2 4	4,505 13 10	4,41,562 0 2	
25,78,304	25,23,721 8 0	47,476 14 3	25,71,198 6 3	(a) Rs. 2,00,000 repayable on 1-1-1928.
7,66,625	7,62,390 1 6	7,921 6 10	7,70,311 8 4	„ 52,91,500 „ „ 1-1-1933.
6,07,054	6,00,451 8 2	8,226 4 10	6,08,677 13 0	„ 22,08,500 „ „ 1-1-1943.
1,47,022	1,46,205 3 7	1,509 6 3	1,47,714 9 10	„ 17,00,000 „ „ 1-1-1946.
18,84,366	18,65,787 13 0	24,437 0 1	18,90,224 13 1	„ 10,09,000 „ „ 1-1-1948.
4,10,676	4,08,382 0 4	4,280 0 9	4,12,662 1 1	„ 43,00,000 „ „ 1-1-1953.
3,62,991	3,58,894 7 8	4,971 2 11	3,63,865 10 7	(b) In January 1889 Rs 10,000 were invested and in subsequent years Rs. 11,000.
32,55,684	32,17,097 2 9	43,005 3 1	32,60,102 5 10	
9,60,577	9,48,293 6 7	12,305 11 3	9,60,599 1 10	
3,84,691	3,81,164 10 0	3,298 12 0	3,84,463 6 0	(c) In 1897-98 Rs. 18,875 were invested in 3½ per cent. Government Paper.
2,30,904	2,27,771 4 0	3,564 8 10	2,31,335 12 10	
7,82,264	7,72,953 10 10	9,606 3 10	7,82,559 14 8	
17,95,400	17,82,568 9 1	8,347 0 10	17,90,915 9 11	
5,69,689	5,62,511 5 5	7,257 13 7	5,69,769 3 0	
5,77,516	5,69,907 0 10	7,027 1 10	5,76,934 2 8	
4,48,813	4,42,173 7 10	5,619 4 6	4,47,792 12 4	
4,75,139	4,73,953 5 10	2,842 15 4	4,76,796 5 2	
3,34,244	3,29,739 1 4	4,090 9 2	3,33,829 10 6	
2,07,652	2,04,885 9 8	2,541 10 10	2,07,427 4 6	
4,09,252	4,05,011 14 11	5,024 5 8	4,10,036 4 7	
6,61,905	6,60,502 7 11	8,069 14 2	6,58,572 6 1	
3,35,115	3,30,140 14 8	4,095 9 7	3,34,236 8 3	
84,237	83,244 4 5	1,032 9 7	84,276 14 0	
2,87,045	2,83,657 12 7	3,518 10 9	2,87,176 7 4	
2,17,06,614	2,14,19,973 10 4	2,87,907 0 9	2,17,07,880 11 1	

133769

P. W. MONIE,
Municipal Commissioner.

Appendix

STATEMENT showing the Interest outstanding on 1st April 1917 on the different of Bombay during that year, and the

	Name of each Loan.	Dates when raised.	AUTHORITY. Corporation Resolution.	AUTHORITY. Government Resolution.
	5 per cent. Loans.			
1	Drainage Loan of 1878 (Rs. 26,94,000) ...	1st November and 1st December 1878.	No. 1296 10-9-78.	No. 2951 28-9-78.
2	The Sanitary Works Loan of 1885-86 (Rs. 44,00,000).	Between 5th May 1885 and 30th March 1886.	Nos. 9021 8-12-81, 905 12-3-82 and 438 16-5-83	Nos 2669 17-7-82, 384 2-2-83, 3771 19-10-83, 460 4-2-84 and 124 27-4-85.
3	The Sanitary Works Loan of 1888 (Rs. 7,00,000).	1st February 1888	No. 199 13-10-86.	No. 1427 4-5-88
4	The Tansa Water Works Loan (Rs. 1,47,00,000).	Between 5th June 1886 and 24th December 1891.	Nos. 1312 13-11-85 and 345 9-4-91.	Nos 561 12-2-86, 1008 16-3-86, 1930 31-5-86, 2876 21-9-87, 3978 21-7 88, 4198 8-10-89, 3392 28-8-90 and 3262-b3 15-9-91.
5	The Drainage and Water Works Loan of 1888 (Rs. 12,00,000).	1st January and 1st July 1888 ...	Nos. 894 20-7-87 and 1145 8-9-87.	No. 873 16-3-88.
6	The Miscellaneous Works Loan, 1888-89 (Drainage and Water Works, Markets and Roads) (Rs. 10,08,500.)	Between 1st November 1888 and 1st July 1889.	No. 29 4-4-88.	Nos. 4937 7-9-88, 3280 19-9-89, 4138 24-11-88
7	The Agripada House Sullage and Water Connections Loan of 1889-90 (Rs. 2,48,000.)	Between 1st January and 1st July 1890.	No. 4698 8-10-86.	Nos. 6547 28-12-89 and 17 3-1-90.
8	The Various Sanitary Works Loan of 1890-91 (Rs. 35,00,000)	Between 25th September 1890 and 1st January 1892.	Nos. 29 4-1-88, 5293 19-11 88, 5605 7-1-89, 572 13-5-89, 5152 25-11-89, 6235 23-1-90, 433 17-4-90 and 1488 22-6-90.	No. 3392 23-8-90.
9	The Municipal Building Loan of 1891 (Rs. 8,00,000).	24th December 1891	No. 11551 9-2-91.	No. 3262 15-9-91.
	4 per cent. Loans.			
10	The Loan for Fire Brigade Quarters and Stations (Rs. 4,50,000).	23rd December 1892, 30th November and 1st December 1893.	No 5144 8-8-92	Nos 1028 29-3-92, 2501 14 6 92, 2164 28-6-92 and 3145 6-9-92.
11	The Loan for repayment of the balance of the 4½ per cent. Government Consolidated Loan (Rs 42 00,000).	28th and 29th June 1893 ...	No. 13956 23 8-93.	No. 1 89 6-6-93.
12	The Loan for Drainage and other Works (Rs. 23,25,000).	12th and 31st January 1894 and 11th and 15th July 1895.	No. 6222 28-9-93.	Nos. 819 3-3-94 and 3764 8-10-94.
*13	The Loan for Sewerage, Wari Bunder, &c., Roads, Burial Ground, and certain Water Works (Rs. 15,75,000 of which the 2nd instalment of Rs. 5,75,000 was raised at 4 per cent.).	17th July 1899	Nos. 504 12-4-94, 13697 7-3-95, 8992 7-11-95, 8976 7-11-95, 12034/5 4-2-97 and 14435 25-3-97.	Nos 3501 2-8-93, 883 22-2 96, 2320 3-6-99 and 2643 28 6-99.
14	The Loan for Sewerage and other Sanitary Works (Rs. 25,00,000).	17th and 18th July 1899 ...	Nos. 8976 7-11-95, 12034/5 4-2-97 and 14435 25-3-97.	Nos 3841 A 28-8-97, Telegram 28-7-98 and 2320 3-6-99.
15	The Loan for Plague purposes (Rs. 20,00,000).	6 lakhs raised between 15th July and 20th Dec. 1899, 6 lakhs raised in Nov 1900 and 8 lakhs raised between 12th Aug. and 9th Oct. 1902.	No. 8099 6-12-97.	Nos. 4960 5-9-98 and 2560 16 9-99.
16	The Loan for Sewerage, Roads and other Sanitary Works (Rs. 19,25,000).	18th and 19th July 1899 and September 1900.	No. 628 18 4-98.	Nos. 4960 5-9-98 and 2540 16-6-99.
17	The Loan for certain Sewerage and Water Works (Rs. 24,75,000).	6 lakhs raised between 15th June and 1st July 1901. 11 lakhs raised between 23rd Aug. and 31st October 1901, 4 lakhs raised between 19th Aug. and 28th Oct. 1902, and 3¾ lakhs raised on 9th Sept. 1903.	No. 1956 14 5 1900.	No 3427 15-6-1901.
18	The Loan for certain Water Works (Rs. 12,75,000).	1st September 1904	No. 244 23-4-08.	No. 4416 22-8-04.
19	The 2nd 24¾ Lakhs Loan for certain Sewerage Works.	Rs. 12 lakhs raised on 3rd September 1905 and Rs. 12¾ lakhs on 9th September 1907.		No. 4004 21-7-05 and Telegram 31 8-05. No. 4792 5-8-07 and Telegram 31-7-07.
20	The 13½ Lakhs Loan for the construction of quarters for Halalkhores and Biggaries.	7th August 1908	No. 2204 of 29-6-08	No. 3447 9-5-08.
21	The 15 Lakhs Loan for Street Improvements.	29th July 1909	No. 7558 of 20-3-07	No. 5178 17-8-08.
22	The 30 Lakhs Loan for the acquisition of sites for the construction of various overbridges in the City.	29th July 1909 and 10th August 1910.	No. 181 of 8-4-09	No. 3862 28-7-09.
23	The 55 Lakhs Loan for Drainage, Sanitary, Water and other Miscellaneous works.	7th and 10th August and 1st November 1911 and 1st August 1913.	No. 6426 of 31-1-10	No. 4680 1-8-11 and Telegram No. 4680-A. 28-7-11
24	The 70 Lakhs Loan for the re-duplication of the Tansa Main and other Auxiliary Works.	9th September 1913, 22nd July 1914 and 10th April 1915.	No. 4051 of 14-10-12	No. 6159 21-8-13 and Telegram 18-8-13.
25	The 20 Lakhs Loan for Street Improvement.	9th September 1913 and 24th September 1915.	No. 4047 of 14-10-12	Do.
26	Loan of Rs. 43 Lakhs for Drainage, Water, Roads and Miscellaneous works.	1st August and 24th September 1915.	No. 4051 of 14-10-12 and No. 2608 of 26-7-15.	7586 (G. D.) 1-10-15
	3½ per cent. Loan.			
	The Loan for Sewerage, Wari Bunder, &c, Board, Burial Ground and certain Water Works (Rs. 15,75,000, of which the 1st instalment of Rs. 10 lakhs was raised at 3½ per cent).	1st December 1896	(*Vide* Reso. Nos. against Loan No. 13.)	(*Vide* Reso. Nos. against Loan No. 13).

D. ROBERTSON,
Acting Chief Accountant.

No. 11.

Loans, the amounts payable for the year 1918-1919, the amounts paid by the Bank Balances outstanding on 31st March 1919.

Date when Loan is repayable.	Interest outstanding on 1st April 1918.	Interest payable in 1918-1919.	Total Interest due.	*Deduct*—Interest paid by the Bank of Bombay.	Outstanding Balance on 31st March 1919.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1st January 1919...	15,712 8 0	7,500 0 0	23,212 8 0	9,912 8 0	13,300 0 0
1st July 1925	45,050 0 0	1,86,950 0 0	2,32,000 0 0	1,94,400 0 0	37,600 0 0
1st February 1928	7,375 0 0	35,000 0 0	42,375 0 0	35,262 8 0	7,112 8 0
Between 1st January 1928 and 1st January 1953.	68,862 8 0	7,35,000 0 0	8,03,862 8 0	7,51,575 0 0	52,287 8 0
1st January 1928	4,037 8 0	60,000 0 0	64,037 8 0	60,525 0 0	3,512 8 0
1st October 1928	5,400 0 0	50,425 0 0	55,825 0 0	51,562 8 0	4,262 8 0
1st July 1929	2,287 8 0	12,400 0 0	14,687 8 0	14,412 8 0	275 0 0
1st July 1930	26,562 8 0	1,75,000 0 0	2,01,562 8 0	1,79,637 8 0	21,925 0 0
1st July 1931	.....	40,000 0 0	40,000 0 0	40,000 0 0	... ..
1st January 1923	1,640 0 0	18,000 0 0	19,640 0 0	17,280 0 0	2,360 0 0
1st July 1922	26,720 0 0	1,68,000 0 0	1,94,720 0 0	1,79,020 0 0	15,700 0 0
1st July 1935	8,350 0 0	93,000 0 0	1,01,350 0 0	92,960 0 0	8,390 0 0
1st July 1936	3,350 0 0	23,000 0 0	26,350 0 0	25,830 0 0	520 0 0
1st November 1939	720 0 0	1,00,000 0 0	1,00,720 0 0	99,620 0 0	1,100 0 0
1st May 1920	7,050 0 0	80,000 0 0	87,050 0 0	80,630 0 0	6,420 0 0
1st June 1940	4,630 0 0	77,000 0 0	81,630 0 0	73,550 0 0	8,080 0 0
1st June 1913	7,140 0 0	99,000 0 0	1,06,140 0 0	98,580 0 0	7,160 0 0
1st August 1934	10,180 0 0	51,000 0 0	61,180 0 0	58,600 0 0	2,580 0 0
1st August 1946	8,400 0 0	99,000 0 0	1,07,400 0 0	1,05,980 0 0	1,420 0 0
1st May 1938	4,160 0 0	54,000 0 0	58,160 0 0	51,360 0 0	6,800 0 0
1st May 1919	2,100 0 0	60,000 0 0	62,100 0 0	58,680 0 0	3,420 0 0
1st May 1919	7,419 15 9	1,20,000 0 0	1,27,419 15 9	1,14,529 15 1	{ 12,890 0 0 0 0 8*
1st June 1912	20 0 0	2,20,000 0 0	2,20,020 0 0	2,20,020 0 0	.....
§1st June 1954 and 1st June 1974.	10,555 5 6	2,80,000 0 0	2,90,555 5 6	2,75,332 4 10	15,223 0 8
1st May 1955	144 10 6	80,000 0 0	80,144 10 6	78,970 0 0	{ 1,170 6 0 4 10 6
1st May 1945	.....	1,88,731 0 0	1,88,731 0 0	1,88,298 7 0	435 9 6
1st July 1936	577 8 0	35,000 0 0	35,577 8 0	34,912 8 0	665 0 0
Total Rs. ...	2,78,444 15 9	31,48,009 0 0	34,26,453 15 9	31,91,840 10 11	2,34,608 9 8* 4 11

* Rs. 4-11-2 to be taken as saving.

§ Rs. 49,40,000 repayable on 1st June 1954.
„ 20,60,000 „ „ 1st June 1974.
Rs. 70,00,000

P. W. MONIE,
Municipal Commissioner.

Appendix No.
WATER WORKS

INCOME FOR 1918-19.

	Amount.
INCOME.	Rs. a. p.
Water Tax and other Miscellaneous Water Works Revenue—*vide* details in Appendix No. F *vide* page 2) ...	* 29,77,602 5 5

* This includes Rs. 15,07,820-5-6 being the amount of Water Tax by measurement, realized during 1918-19 as shown in the following Statement :—

Total Rs. ...	29,77,602 5 5

D. ROBERTSON,
Acting Chief Accountant.

STATEMENT showing the quantity of Water by meter supplied under different Sub-heads and the Water Tax by measurement realized at different rates for the uniform quantity of 1,000 gallons.

1913-14.		1914-15.		1915-16.		1916-17.		1917-18.		19
	Amount.	Gallons.	Amount.	Gallons.	Amount.	Gallons.	Amount.	Gallons.	Amount.	Gallons.
	Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.		Rs. a. p.	
550	@ As. 8 17,246 12 5	2,55,23,005	@ As. 8 12,761 8 1	2,29,59,895	@ As. 8 11,479 15 2	3,83,30,975	@ As. 8 19,165 7 8	4,98,19,350	@ As. 8 24,909 10 11	5,60,46,930
100	@ As. 8 2,60,341 8 10	54,69,14,848	@ As. 8 2,73,457 7 0	53,14,81,781	@ As. 8 2,65,740 14 3	60,88,04,250	@ As. 8 3,04,402 1 11	60,57,04,110	@ As. 8 3,02,852 0 11	86,09,72,800
931	@ As. 8 9,301 15 4	2,35,84,750	@ As. 8 11,792 6 0	1,82,57,750	@ As. 8 9,128 14 0	2,91,29,645	@ As. 8 14,564 13 2	3,60,46,860	@ As. 8 18,023 7 2	2,77,18,400
789	@ As. 8 1,32,235 13 11	29,34,08,620	@ As. 8 1,16,704 4 11	27,63,10,920	@ As. 8 1,38,155 7 2	27,29,75,185	@ As. 8 1,36,487 9 6	38,56,14,920	@ As. 8 1,92,807 7 8	41,93,94,130
750	@ As 4 23,457 11 0	10,10,53,877	@ As. 4 25,263 7 6	13,03,46,755	@ As. 4 32,586 11 0	15,60,32,940	@ As. 4 39,008 3 9	20,41,48,399	@ As. 4 51,037 1 7	21,19,65,350
					At different rates.		At different rates		At different rates	
226	50,535 13 10	22,77,03,579	50,303 4 2	33,32,07,749	75,272 15 10	37,65,63,266	83,041 14 8	38,67,06,134	1,23,528 5 1	7,28,85,250
	@ As. 6½		@ As. 6½		@ As. 6½		@ As. 6½		@ As. 6½	
531	1,99,603 6 9	52,39,93,475	2 12,872 5 5	47,90,82,988	1,94,627 7 5	55,87,11,870	2,26,976 11 0	48,51,41,500	1,97,088 11 9	55,29,33,030
	@ As. 6½		@ As. 6½		@ As. 6½		@ As. 6½		@ As. 6½	
785	67,133 15 1	21,47,61,065	87,246 10 5	28,34,62,990	1,15,156 13 5	34,58,31,070	1,40,493 13 11	42,19,10,705	1,71,401 3 7	44,06,71,540
					At different rates.		At different rates		At different rates	
574	1,11,647 14 2	15,26,05,525	1,15,261 8 10	15,83,54,707	1,17,822 5 10	12,65,79,250	83,347 11 2	5,82,83,650	56,685 2 6	18,18,68,850
					At different rates.		At different rates		At different rates	
285	2,14,474 13 6	78,88,61,755	2,11,816 5 6	64,68,05,723	1,98,176 13 11	1,07,94,59,946	2,07,796 5 9	1,31,44,83.017	2,80,728 5 4	1,22.74,86,170
421	10,85,979 12 10	2,33,84,10,439	11,17,479 3 10	2,88,02,71,258	11,58,148 6 0	3,59,24,18,397	12,55,284 12 6	3,94,78,58,645	14,19,061 8 6	4,05,19,32,450

ccordance with the Water Rules for the respective years.

s per 1,000 gals.

m As. 2 to As. 8.

A. These figures are exclusive of refunds.

12.
ACCOUNT.

EXPENDITURE FOR 1918-19.

EXPENDITURE.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
General Superintendence (proportion of) (*vide* note ‡ at page 58).	47,340 6 9			
Assessment and Collection Charges (proportion of) (*vide* note † at page 58)	76,898 4 6	1,24,238 11 3		
Maintenance of Water Works (*vide* page 60)	3,93,502 13 8			
New Works (*vide* note at page 60)	34,287 14 5	4,27,590 12 1		
			5,51,829 7 4	
Interest on Water Works Loans (Debt)—				
Due to Government—Vehar Debt		81,981 2 0		
Due to the Public—				
Portion of 10 Lakhs for Bhandarwada Water Works of the Loan of Rs. 26,94,000 of 1878	3,679 7 7			
Water Works portion of the 44 Lakhs Sanitary Works Loan (Rs. 18,98,921)	83,897 12 6			
Water Works portion of the 7 Lakhs Sanitary Works Loan (Rs. 1,90,389)	9,590 13 6			
Water Works portion of the 12 Lakhs Drainage and Water Works Loan (Rs. 85,000)	4,287 3 0			
Tansa Water Works Loan of Rs. 147 lakhs	7,51,575 0 0			
Water Works portion of the Rs. 10,08,500 Miscellaneous Works Loan (Rs 1,35,000)	6,902 4 8			
Water Works portion of the 35 Lakhs Various Sanitary Works Loan (Rs. 9,20,000)	47,219 0 0			
Water Works portion of the 42 Lakhs Loan for repayment of Government Consolidated Loan (Rs. 28,59,762) ...	1,21,893 15 2			
Water Works portion of the 23¼ Lakhs Loan for Drainage and other Works (Rs. 2,45,500)	9,8 5 12 5			
Water Works portion of the 15⅝ Lakhs Loan for Sewerage, Wari Bunder, &c., Works (Rs. 30,000)	1,157 0 0			
Water Works portion of the 25 Lakhs Loan for Sewerage, &c., Works (Rs. 2,31,297)	9,216 11 6			
Water Works portion of the 24¾ Lakhs Loan for certain Sewerage and Water Works (Rs. 2,73,000)	10 917 12 8			
12¾ Lakhs Loan for certain Water Works (Rs. 12,75,000) ...	58.600 0 0			
55 Lakhs Loan for Miscellaneous Works (Rs. 4,49,542) ...	17,983 5 0			
70 Lakhs Loan for Reduplication of the Tansa Main and other auxiliary works	2,75,332 4 10			
Water Works portion of the 43 Lakhs Loan for Drainage, Water, Roads, and Miscellaneous Works (Rs. 2,00,500) ...	8,779 15 4			
		14,20,848 5 9		
Commission to the Bank of Bombay for payment of interest on the Water Works portion of the different Loans	6,298 12 6			
Miscellaneous Loan Charges, including Commission paid to the Bank of Bombay for drawing interest on Sinking Fund Investments	485 7 10	6,784 4 4		
			15,12,613 12 1	
Payments towards the reduction of debt or investment of Sinking Fund of the following Water Works Loans:—				
Vehar Debt		28,994 14 0		
Portion of the 10 Lakhs for Bhandarwada Water Works of the Loan of Rs. 26,94,000 of 1878		77,203 9 9		
Water Works portion of the 44 Lakhs Sanitary Works Loan (Rs. 18,98,921) ...		17 814 11 0		
Do. do. 7 Lakhs Sanitary Works Loan (Rs. 1,90,389) ...		2,250 6 0		
Do. do. 12 Lakhs Drainage and Water Works Loan (Rs 85,000)...		901 5 8		
Do. do. Rs. 10,08,500 Miscellaneous Works Loan (Rs. 1,35,000)		1,529 14 6		
Tansa Water Works Loan of Rs. 147 Lakhs		64,742 7 5		
Water Works portion of the 35 Lakhs Various Sanitary Works Loan (Rs. 9,20,000)		11,367 4 1		
Do. do. 42 Lakhs Loans for repayment of Government Consolidated Loan (Rs. 28,59,762)		55,411 4 8		
Do. do. 23¼ Lakhs Loan for Drainage and other Works (Rs. 2,45,500)		2,901 13 9		
Do. do. 15⅝ Lakhs Loan for Sewerage, Wari Bunder, &c., Works (Rs 30,000)		344 5 9		
Do. do. 25 Lakhs Loan for Sewerage, &c., Works (Rs. 2,31,297)		2,750 14 4		
Do. do. 24¾ Lakhs Loan (Rs. 2,73,000)		3,157 8 6		
Do. do. 12¾ ,, ,, ...		24,415 4 8		
Do. do 55 ,, ,, (Rs 4,49,542)		9,785 15 3		
70 Lakhs Loan for Reduplication of the Tansa Main and other auxiliary works ...		76,935 5 1		
43 Lakhs Loan for Drainage, Water, Roads and Miscellaneous Works (Rs. 2,00,500)		4,211 6 2	3,84,374 6 7	
				24,48,817 10 0
Balance—Income in Excess of Expenditure ...				5,28,784 11 5
				29,77,602 5 5

P. W. MONIE,
Municipal Commissioner.

Appendix

WATER WORKS

SCHEDULE OF LIABILITIES AND

LIABILITIES.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Debt due to Government—			
Government of Bombay on account of Vehar Debt (see page 98)		21,08,628 11 9	
Debt due to the Public—			
Portion of 10 lakhs for the Bhandarwada Water Works of the Loan of Rs. 26,94,000 of 1878	19,487 12 1		
Water Works portion of the 44 lakhs Sanitary Works Loan.	16,13,651 4 7		
Water Works portion of the 7 lakhs Sanitary Works Loan.	1,90,389 0 0		
Water Works portion of the 12 lakhs Drainage and Water Works Loan	85,000 0 0		
Water Works portion of the Miscellaneous Works Loan of Rs. 10,08,500	1,35,000 0 0		
Water Works portion of the 35 lakhs Various Sanitary Works Loan	9,20,000 0 0		
Tansa Water Works Loan of 147 lakhs	1,47,00,000 0 0		
Water Works portion of the 42 lakhs Loan for repayment of the balance of Government Consolidated Loan ...	28,59,762 0 0		
Water Works portion of the 23¼ lakhs Loan for Drainage and other Works	2,45,500 0 0		
Water Works portion of the 15¾ lakhs Loan for Sewerage, Wari Bunder, &c., Roads, Burial Ground and certain Water Works	30,000 0 0		
Water Works portion of the 25 lakhs Loan for Sewerage, Roads and other Works	2,31,297 0 0		
Water Works portion of the 24¾ lakhs Loan for certain Sewerage and Water Works	2,73,000 0 0		
12¾ Lakhs Loan for certain Water Works	12,75,000 0 0		
Water Works portion of the 55 Lakhs Loan for Mis. Works.	4,49,542 0 0		
70 Lakhs Loan for the Reduplication of the Tansa Main and other Auxiliary Works	70,00,000 0 0		
Water Works portion of 42 Lakhs Loan for Miscellaneous Works	2,00,500 0 0		
		3,02,28,129 0 8	3,23,36,767 12 5
II.—Amount Advanced from Surplus Loan balances ...			1,84,543 2 6
III.—Sinking Funds on Municipal Loans (invested as per contra)			76,86,888 5 3
IV.—Special Funds—			
Worn-out Water Mains Renewal Fund (invested as per contra)		6,38,717 10 2	
Net Premia Fund (invested as per contra)		1,63,611 1 8	
			8,02,323 11 10
V.—Capital Account—			
General Reserve being Assets in excess of Liabilities ...			59,48,833 12 9
Total Rs.			4,69,59,361 12 9

D. ROBERTSON,
Acting Chief Accountant.

No. 13.

ACCOUNT.

ASSETS AT 31ST MARCH 1919.

ASSETS.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Properties—			
Water Works executed out of Loan and Reserve Funds as detailed at pages 92 to 96 (*vide* Appendix No. 8) ...			3,84,70,144 11 8
II. Investments—			
1. Bank of Bombay, Municipal Loans Sinking Fund Deposit Accounts—			
Rs. a. p.			
5 per cent. Loans 44,11,729 7 11			
4 „ „ 3½% basis ... 28,67,187 14 2			
4 „ „ 3% basis ... 3,96,536 0 2			
3½ „ „ 11,434 15 0			
	76,86,888 5 3		
2. Bank of Bombay—Worn-out Water Mains Renewal Fund Deposit Account (*vide* page 65)	6,38,717 10 2		
3. Bank of Bombay—Net Premia on different Municipal Loans Deposit Account (*vide* note * at page 65) ...	1,63,611 1 8		
		84,89,217 1 1	
4. Loan Funds Investments Deposits (*vide* note ‡ at page 75)	54,547 2 10		
Amount advanced from Surplus Loan balances per contra.	1,84,543 2 6		
	2,39,090 5 4		
Less—Value of properties (Water Works) executed out of Loan Funds Advances (*vide* note ‡ at page 79)	2,39,090 5 4	.....	84,89,217 1 1
		TOTAL Rs. ...	4,69,59,361 12 9

P. W. MONIÉ,
Municipal Commissioner

Appendix No. 14.

STATEMENT showing the New Works financed from Surplus Cash (Revenue) Balance pending adjustment against savings in Loan Works already completed or inclusion in a New Loan to be raised hereafter.

Serial No.	PARTICULARS OF WORK.	Amount sanctioned.	Amount of expenditure adjusted against Loan Funds.	Balance.		Actual expenditure incurred up to 31st March 1919 to be adjusted hereafter.	REMARKS.
				Required for expenditure.	Not required.		
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
1	Construction of King Edward VII Memorial Hospital (Municipal share of the cost)...	3,22,197 7 7	3,15,500 12 1	.....	6,696 11 6	.....	
2	Widening and reconstructing Mahim Bazaar Road	4,00,000 0 0	3,41,073 12 8	.....	58,926 3 4	.....	
3	Widening of Church Gate Street and Armenian Lane and construction of a new straight road from the junction of Esplanade Road and Armenian Lane eastwards to Tamarind Lane :— Total cost including the purchase of frontages	17,00,000 0 0	.....	12,92,569 4 11	.....	4,07,430 11 1	
	Less— Amount to be recovered by the sale of frontages	10,00,000 0 0	.....	10,00,000 0 0	.....	.....	
		7,00,000 0 0	.....	2,92,569 4 11	.....	4,07,430 11 1	
4	Widening and draining Waudby Road	36,700 0 0	36,673 8 11	.....	26 7 1	.....	
5	Paving Frere Road with Indian Wood paving blocks (experimental)	50,000 0 0	.....	.....	50,000 0 0	.....	
6	Cost of a plot of land at Clerk Road required for the use of the Road Department for stacking materials, parking carts, &c. ...	24,300 0 0	24,300 0 0	.....	.....	.....	
7	Overbridge at DeLisle Road ...	2,43,000 0 0	24,329 8 0	.....	2,18,670 8 0	.....	
8	Establishment charges for over bridges	3,000 0 0	225 10 9	.....	2,774 5 3	.....	
9	Construction of a new proposed road from Cadell Road towards the Hindu Burial Ground ...	1,100 0 0			96 0 0	1,004 0 0	
10	Construction of a new straight road from the junction of Old Parbhadevi Road and the proposed Foras Road to join the widened Mahim Bazar Road . Total cost including the purchases of frontages... ...	3,24,000 0 0	.....	1,43,671 8 10	.....	1,80,328 7 2	
	Less— Amount to be recovered by the sale of frontages.	1,00,000 0 0	.....	1,00,000 0 0	.....	.....	
		2,24,000 0 0	.....	43,671 8 10	.....	1,80,328 7 2	
11	Constructing a S. W. Drain 2'×2'×6" in Thakurdwar Road, between Queen's Road and Girgaum Road...	21,000 0 0	17,389 7 3	.....	3,610 8 9	.....	
12	Construction of a new drainage outfall at Love Grove	4,60,000 0 0	3,69,895 4 9	.....	90,104 11 3	.....	
13	Payment to Mr. G Mudgley Taylor for his advice on the following drainage schemes— (1) New S. W. Outfall at Worli together with pumping arrangements	3,200 0 0	3,142 12 1	.....	57 3 11	.....	
	(2) Additional pumping machinery at Love Grove Pumping Station on account of the duplication of the Tansa Main	1,800 0 0	1,787 11 2	.....	12 4 10	.....	
	(3) Initial advice on the question of a S. W. Outfall at Worli.	4,000 0 0	3,929 13 2	.....	70 2 10	.....	
	Carried over Rs. ...	24,94,297 7 7	11,38,248 4 10	8,36,240 13 9	4,81,045 2 9	5,88,763 2 3	

Appendix No. 14—*concluded.*

Serial No.	Particulars of Work.	Amount sanctioned.	Amount of expenditure adjusted against Loan Funds.	Balance.		Actual expenditure incurred up to 31st March 1919 to be adjusted hereafter.	Remarks.
				Required for expenditure.	Not required.		
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
	Brought forward Rs. ...	24,84,297 7 7	11,38,248 4 10	3,36,240 13 9	4,31,045 2 9	5,88,763 2 3	
14	Provision of a 9″ pipe sewer in a portion of Mahim District, a septic tank and a hopper near the foreshore at Mori Road, Mahim	7,900 0 0	3,992 7 6	.....	3,907 8 6	.....	
15	Measures for relieving surcharging of Sewers	29,000 0 0	1,464 8 3	.....	18,535 7 9	.....	
16	Completion of House drainage connections in different parts of the City	40,000 0 0	21,304 11 9	.....	18,695 4 3	.....	
17	Giving street connections to storm-water drains in the City ...	7,000 0 0	2,920 15 0	.....	4,079 1 0	.....	
18	Providing a 4′ circular storm-water drain in Parel Road from Chinchpokli Road to Connaught Road	23,200 0 0	95 15 8	.....	23,104 0 4	.....	
19	Establishment charges	10,476 0 0	6,964 9 11	.....	3,511 6 1	.....	
20	Laying 5″ water mains in a portion of the City Improvement Trust Scheme No. XXXI between Jeejeebhoy Lane and Lalbaug ...	14,300 0 0	.....	.....	14,300 0 0	.....	
	Tansa Reduplication and Auxiliary Works :—						
21	Duplicating Syphons Nos. 1 to 7.	4,338 0 0	.....	.....	4,338 0 0	.....	
22	Duplicating Syphon No. 8 ...	2,663 3 0	.....	.....	2,663 3 0	.....	
23	Distributing mains in the City.	43,472 14 4	24,705 6 4	.....	18,767 8 0	.....	
24	Raising Tansa Dam	1,460 0 0	918 10 9	.....	541 5 3	.....	
25	Reservoir at Golanji Hill (Contingent expenses)	3,783 6 6	3,783 6 6	.....	.....	.....	
26	Miscellaneous expenses in connection with the removal of the villages in the Tansa Catchment area	500 0 0	36 9 0	.....	463 7 0	.....	
27	Laying 9″ × 5″ mains on the Estate of the City Improvement Trust between Kingsway and the G. I. P. Railway Dadar Station	44,434 0 0	7,529 5 0	.....	36,904 11 0	.....	
28	Amount payable to the G. I. P. Railway as Municipal contribution towards the cost of extending the Tansa Main overbridge at Ghatkoper on account of the quadrupling of the Railway lines	25,000 0 0	23,768 0 0	.....	1,232 0 0	.....	
29	Constructing a Mechanical Filtration Plant at Tulsi Lake for purifying Tulsi water and the work of conversion of the obsolete filters at Malabar Hill into Reservoir storage	1,50,000 0 0	.....	1,41,986 10 0	.....	8,013 6 0	
30	Tansa Triplication—Cost of making a survey of the country through which a new aqueduct is to be constructed	18,000 0 0	.....	15,563 4 5	.....	2,436 11 7	
31	Filling in the Roman Catholic Cemetery at Haines Road and acquisition of additional land therefor, including compound wall, drainage arrangements, &c.	50,890 0 0	50,573 8 0	.....	316 8 0	.....	
32	Construction of 10 new kutchra wagons for the Health Department	30,010 0 0	.....	.....	30,010 0 0	.....	
		29,91,724 15 5	12,86,506 6 6	4,93,790 12 2	6,12,414 8 11	5,99,213 3 10	

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

Appendix

STATEMENT showing the quantity and value of several articles upon which Town Duty was

Duty Collected by	Grain and Pulse at 6 annas per Candy.			Flour of all sorts at 75 per cent. ov the rate at the time being levied on the grain from which flour is prepared.			Wines and Spirits at 4 annas per Gallon.			Beer at 6 pies per Gallon.		
	Candies.	Furras.	Amount of Duty.	Candies.	Furras.	Amount of Duty.	Gallons.	Pints.	Amount of Duty.	Gallons.	Pints.	Amount of Duty.
Bombay Port Trust.			Rs. a. p.			Rs. a. p.			Rs. a. p.			Rs. a. p.
April 1918	39,378	..	14,766 12 0	6	..	1 11 0	30,429	1½	7,607 4 9	1,03,520	0	3,235 0 0
May ,, ...	25,208	3⅜	9,453 2 11	....	..	.....	62,739	6½	15,681 15 3	25,466	0	889 9 0
June ,, ...	123,927	⅛	46,472 10 3	....	..	.....	17,579	4⅜	4,394 14 5	39,445	4	1,232 10 9
July ,, ...	13,768	2	5,163 1 6	....	..	.....	1,67,246	3⅝	41,811 9 6	1,48,781	4	4,649 6 9
August ,, ...	54,881	⅛	20,617 14 3	....	..	.. ..	22,358	1⅜	5,589 8 8	42,650	0	1,332 13 0
September ,, ...	55,168	7	20,650 13 3	....	..	.. ..	47,787	4	11,946 14 0	57,721	0	1,803 12 6
October ,, ...	43,656	4⅜	16,37 3 6	....	..	.....	60,511	⅛	15,127 12 2	67,550	6⅜	2,110 15 5
November ,, ...	143,400	4	53,775 3 0	21	6⅜	6 2 0	27,400	6¼	6,850 3 3	66,5 0	0	2,079 6 0
December ,, ...	141,922	..	53,220 12 6	....	..	.....	41,424	7⅛	10,356 8 7	92,472	0	2,889 12 0
January 1919	173,492	6	65,059 12 6	20	5⅛	5 13 0	60,609	6⅝	15,152 7 5	75,354	0	2,354 13 0
February ,, ...	209,651	7⅜	78,619 7 9	....	..	.....	31,915	⅛	7,978 12 1	26,043	51	876 5 10
March ,, ...	309,337	4⅜	116,001 9 3	....	..	.....	31,782	6½	7,945 10 9	97,649	2⅜	3, 51 8 8
Total ..	13,33,7930	⅜	5,00,172 6 2	48	3⅝	13 10 0	6,01,754	7⅛	1,50,416 3 10	8,48,193	6⅛	26,506 0 11
G. I. P. Railway.												
April 1918	1,45,320	3⅜	54,495 2 9	909	4⅛	255 13 0	2,031	4	507 14 0	8,272	0	258 8 0
May ,, ...	2,51,129	6⅜	94,173 11 0	....	..	.....	1,819	2	474 13 0	5,256	0	164 4 0
June ,, ...	2,07,313	1¼	77,742 7 0	....	..	.....	902	0	225 8 0	10,480	0	327 8 0
July ,, ...	1,30,724	6⅜	49,021 13 0	....	..	.....	748	0	187 0 0	6 342	0	198 3 0
August ,, ...	2,01,474	5⅜	75,553 0 0	1,660	3⅝	464 3 0	484	0	121 0 0	10,4 0	0	325 0 0
September ,, ...	2,72,989	5⅜	1,02,371 2 0	....	..	.....	2,875	0	718 12 0	34,944	0	1,092 0 0
October ,, ...	70,150	0	26,306 4 0	2,408	0	677 4 0	1,3 0	0	337 8 0	11,440	0	357 8 0
November ,, ...	30,420	0	11,407 8 0	1,427	6⅜	4 6 0	1,516	0	379 0 0	4,416	0	1 8 0 0
December ,, ...	21 974	4	8,240 7 0	43	5⅜	12 2 0	1,217	6	3 4 7 0	14 820	0	463 2 0
January 1919	28,743	6⅜	10,778 15 0	416	1⅞	117 1 0	2 51,348	4	62,837 2 0	18, 20	0	585 0 0
February ,, ...	37,880	5⅛	14,205 4 0	1,123	2⅝	344 1 0	1,532	0	383 0 0	18,720	0	585 0 0
March ,, ...	54,240	5⅜	20,565 4 0	3,113	4⅝	8 5 11 0	1,26,537	5½	31,734 6 9	15,948	0	498 6 0
Total ..	14,52,962	2½	5,44,860 13 9	11 202	0	3,150 9 0	3,92,841	5½	98,210 6 9	1,59,758	0	4,992 7 0
B. B. & C. I. Ry.												
April 1918	72,090	5½	27,034 0 0	424	3⅝	119 6 0	5 213	0	1 303 4 0	3,146	0	98 5 0
May ,, ...	84,865	2⅜	31,713 0 0	161	0⅝	101 9 0	5,545	1	1,386 6 0	6,464	0	202 0 0
June ,, ...	99,3 4	4	37,246 11 0	685	6⅜	192 14 0	3 975	0	993 12 0	6,814	0	203 9 0
July ,, ...	97,.36	5⅛	36,538 12 0	731	4⅜	205 12 0	5,836	0	1,4 4 0 0	3,190	0	99 11 0
August ,, ...	59,248	2⅜	22,218 2 0	790	1⅞	22 4 0	7,986	0	1,996 8 0	4,290	0	134 1 0
September ,, .. .	79,469	5⅛	29,808 10 0	1,557	6⅜	381 14 0	6,488	0	1,747 0 0	5,316	0	1 6 2 0
October ,, ...	65,617	5⅛	24,606 10 0	579	4⅛	163 0 0	5,6 8	0	1,420 12 0	1.100	0	34 6 0
November ,, ...	24 041	6⅜	9,015 11 0	705	6⅜	198 8 0	5,933	6	1,333 7 0	1.936	0	60 8 0
December ,, ...	39,4 8	5⅛	14.804 4 0	890	1⅞	250 6 0	2 850	0	712 8 0	5,2 0	0	165 0 0
January 1919	58,703	1⅜	22,013 3 1	1,962	0	551 13 0	2,161	0	540 4 0	5,344	0	167 0 0
February ,, ...	38,178	6⅜	14,3 7 1 0	2,731	2⅝	768 3 0	3.053	0	763 4 0	3,118	0	97 7 0
March ,, ...	87,719	6⅜	32,894 15 0	1,794	0	504 9 0	5,977	0	954 4 0	5,344	0	167 0 0
Total ..	8,05,594	4	3,02,210 7 0	13,013	6⅜	3,620 2 0	58,691	2	14,655 5 0	51,042	0	1,595 1 0
GRAND TOTAL ..	35,92,649	6⅝	13,47,243 10 11	24,264	1⅞	6,824 5 0	10,53,247	7⅛	2,63,311 15 7	10,58,993	6⅝	33,093 8 11
Deduct— Refunds passed by the Dy. Assessor & T.D R. Officer	19,02,048	1⅜	7,13 268 1 0	2,24,066	1⅞	63,018 10 0	1,02,320	0	25,580 0 0	3,25,314	0	10,166 1 0
Net Revenue ..	16,90,601	5⅝	6,33,975 9 11	....	..	.....	9,50,927	7⅛	2,37,731 15 7	7,33,679	6⅜	22,927 7 11
Excess Refund over Collection	..	..	....	1 99,802	0	—56,194 5 0	....	..	.....	....	..	.....

ABSTRACT.

			Rs. a. p.	Rs. a. p.
Balance of collections on 31st March 1918 due by—				
Port Trust			67,091 2 3	
G. I. P. Railway			81,436 4 9	
B. B. & C. I. Railway			11,101 10 0	
				1,59,644 4 7
Add—				
Collections for 1918-1919—				
Port Trust			23,60,543 12 0	
G. I. P. Railway			10.47.004 0 0	
B. B. & C. I. Railway			6,83,252 10 9	
				40,90,800 6 9
				44,50,444 10 9
Deduct— Refunds paid in 1918-1919..			22,57 723 15 0	
		Rs. a. p.		
Balance of collections on 31st March 1919, due by—	Port Trust	.. 13,536 9 9		
	G. I. P. Railway ..	.. 21,054 3 7		
	B. B & C. I. Railway..	.. 5,016 8 0		
			39,607 5 4	
				22,97,331 4 4
				19,53,113 6 5
Deduct— Amounts of bills for commission charges for February 1918 recovered by the Railway Companies in 1918-19—				
Commission charges Bill from G. I. P Railway for February 1918		.. 3,350 13 1		
Do. do. B. B. & C. I. Railway for February 1918		.. 1,604 5 4		
			4,955 2 5	
Collections from the G I P. Railway for 1918-19 credited in this office books in 1919-20.			14,823 10 11	
				19 778 13 4
				1,934,334 9 1
Add— Collections from he G. I. P. Railway for 1917-18, credited in this office books in 1918-19			20,383 7 6	
Commission charges bill from B. B. & I. C Railway for February 919 recovered by the Railway Company in 1919-20			864 10 4	
				21,248 1 10
Total ..				...19,54,582 10 11

vide Appendix No. 1.

D. ROBERTSON,
Acting Chief Accountant.

No. 15.

levied during 1918-19 under Section 192 (1) of the City of Bombay Municipal Act of 1888.

Sugar at 8 Annas per Cwt.				Ghee at 10 Annas per Bombay Maund.			Timber at 2½ per cent. on Market Value.		Firewood at 2 Annas per Candy.			Total Monthly Collections.
Cwts.	qrs.	lbs.	Amount of Duty.	Maunds.	Seers.	Amount of Duty.	Value.	Amount of Duty.	Candies.	Maunds.	Amount of Duty.	
			Rs. a. p.			Rs. a. p.	Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.
473,046	2	3½	2,36,523 4 3	26,785	30	16,866 1 6	8,12,321 14 0	20,308 0 9	68,047	7	8,505 14 6	3,07,814 0 9
12,614	0	24½	6,307 1 9	106	23	66 9 9	5,90,144 9 4	22,253 9 10	55,426	0	6,928 4 0	61,638 4 6
1 8,841	8	0	99,420 14 0	3,283	39	2,050 9 9	6,04,715 0 0	15,117 14 0	1,772	14	221 9 0	1,18,911 2 2
298,797	3	22	1,13,598 15 7	130	15	81 7 9	6,21,365 10 0	15,534 2 3	283	14	35 7 0	1,80,674 2 4
93,410	0	14	46 705 1 0	1,543	31	967 15 9	3,76,007 10 8	9,400 3 2	256	14	32 1 0	84,645 8 10
61,574	3	0	32,787 6 6	11,360	25	7,100 6 3	4,06,306 0 8	10,157 10 5	2,314	0	289 4 0	84,736 2 5
270,161	8	17½	1,35,080 15 3	11,368	15	7,105 3 9	2,27,012 14 8	5,675 6 2	10,941	0	2,617 10 0	1,84,089 1 3
1 9,883	2	14	89,941 13 0	3,680	31	2,237 15 9	5,54,8 7 4 8	13,812 2 11	14,38	0	1,797 8 0	1,70,560 5 11
361,220	2	16½	1,84,510 5 2	19,280	9	12,050 2 3	5,41,959 2 8	13,548 15 8	32,318	21	4,039 13 6	2,80,716 0 2
523,345	2	24½	2,61,472 13 9	17,405	2	10,878 2 6	11,84 571 0 8	29,114 4 5	60,867	14	7,6.8 7 0	3,91,846 9 7
139,183	3	24½	69,591 15 9	18,114	9	11,315 2 3	6,40,946 7 4	16,023 10 7	42,046	0	5,255 12 0	1,89,661 2 3
157,615	3	21	78,807 15 6	15,564	23	9,727 13 9	13,05,578 8 8	32,639 7 5	56,617	7	7,077 2 6	2,55,251 3 10
27,09, 97	0	12½	13,54,848 9 0	1,18,716	12	80,447 11 0	81,15,8 6 3 4	2,03,646 6 7	3,55,710	7	44,463 12 6	23,60,543 12 0
18,082	3	14	9,016 7 0	16,370	30	10,231 11 6	36 755 0 0	918 14 0	6,792	0	849 0 0	76,533 6 3
21 487	3	14	10,743 15 0	13,784	18	8,615 4 6	77,722 8 0	1,943 1 0	8,37	0	1,046 10 0	1,17,161 10 6
22,055	2	0	11,027 12 0	11,065	21	6,916 0 0	1,27,670 0 0	3,191 12 0	1 724	14	215 9 0	99,616 8 0
61,146	0	0	31,573 0 0	12,5 7	12	7 867 1 0	2 03,0 5 0 0	5,077 6 0	6,616	0	835 12 0	94,760 8 0
77,424	2	14	38,712 5 0	35,242	7	22 088 13 9	2,16,532 8 0	5,413 5 0	3 536	0	442 0 0	1,43.119 10 9
85,984	0	14	42,992 1 0	31,9 0	24	19 9 7 14 0	2,80 000 0 0	7,000 0 0	3, 56	0	394 8 0	1,74,556 5 0
76,986	0	0	38,493 0 0	2 696	17	14,810 4 3	79,882 8 0	1,997 1 0	1,585	0	148 2 0	83,176 15 3
26,24	3	21	13,120 7 6	8,786	16	5,491 8 0	61 465 0 0	1,536 10 0	971	0	121 6 0	32,698 13 6
13,366	3	14	6,683 7 0	31,483	15	19,677 1 9	67,212 8 0	1.680 5 0	4,255	14	531 15 0	37,592 14 9
8,554	1	0	4.277 2 0	11.834	7	7,396 5 9	1 04 8.0 0 0	2,620 8 0	1,366	0	170 12 0	88,782 13 9
9,579	0	0	4,789 8 0	9,099	1	5,686 14 3	97,350 0 0	2,433 12 0	1,949	14	243 9 0	28,671 0 3
13,168	1	0	6,584 2 0	14,769	25	9,231 0 3	31,572 8 0	789 5 0	1,004	0	125 8 0	70,4 3 11 0
436,026	1	7	2,18,013 2 6	2,20,799	33	1,37,999 15 0	13,74,677 8 0	34,601 15 0	41,397	14	5,174 11 0	10,47,004 0 0
207	3	14	103 15 0	4 398	0	30,248 12 0	21.849 0 0	546 0 0	46.9 2	0	5,872 12 0	65,826 6 0
677	1	0	338 10 0	35,365	8	22,103 4 0	15,535 0 0	388 10 0	43,033	14	5,379 3 0	61.612 10 0
297	2	0	148 12 0	39,618	0	24 761 4 0	47,4 0 0	1 198 4 0	49 188	14	6,148 9 0	70,891 11 0
13	2	0	6 12 0	57,9 8	33	36,193 0 3	26 445 0 1	662 2 0	51,727	0	6,465 14 0	81,635 15 3
601	1	0	300 10 0	71,409	16	44.630 14 0	30.8 0 0 0	7 1 8 0	42,707	0	5,1 .88 6 0	75.562 5 0
882	1	0	441 2 0	80.954	24	50,596 10 0	14 775 0 0	369 6 0	35,227	0	4,403 6 0	87,919 2 0
412	3	14	206 7 0	46.230	4	28 893 13 0	28,261 4 0	706 8 6	29,190	0	3,648 12 0	69,680 4 6
296	1	0	148 2 0	1 .603	4	8,501 15 0	50,580 0 0	1,264 8 0	25,367	14	3,158 7 0	23.681 2 0
216	2	14	108 5 0	25,720	8	16,112 10 0	52,0 5 0 0	1,300 14 0	19,908	0	2,488 8 0	35,942 7 0
871	1	14	435 11 0	2 ,068	0	12,542 8 0	19,945 0 0	498 10 9	30,061	0	3,757 10 0	40,507 3 0
212	1	14	106 3 0	14,926	12	9, 28 15 0	16,255 0 0	406 6 0	24,442	0	3,055 4 0	28,842 11 0
818	0	14	409 1 0	19,872	12	12,.20 3 0	73, 55 0 0	1,84 6 0	1 3 8	0	2,419 8 0	51,650 14 0
5.517	1	0	2,758 10 0	4,74,131	1	2,96,333 12 3	3,98,126 4 0	9,9 3 2 6	4,76,686	14	59.086 3 0	6,83,252 10 9
31,51,240	2	20⅝	15,75,620 5 6	8,23,650	9	5,14,781 6 3	99,28,019 15 4	2,48,200 8 1	8,13,797	7	1,01,724 10 6	40,90,800 6 9
24,68,363	1	14	12.34.181 11 0	4,77.215	8	2,98.259 8 0	7,68.670 0 0	19.216 12 0	66,405	14	8,300 11 0	23,71,991 6 0
6,82,877	1	6⅝	3,41,438 10 6	3,45,435	1	2.16,521 14 3	91,59,319 15 4	2,28,983 12 1	7,47,391	21	93,423 15 6	17,75,003 5 9
.....			.....	....		.....	.....	....	....	..	.....	—56,194 5 0
											Net Revenue .. Rs ..	17,18,809 0 9

P. W. MONIE,
Municipal Commissioner.

Appendix No. 16.

STATEMENT showing the net Revenue derived on different dutiable articles during the last ten years commencing from 1909-10 to 1918-19.

Articles.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
	@ annas 4.	@ annas 6.	@ annas 6.	@ annas 6.	@ annas 6.	@ annas 6.	@ annas 6.	@ annas 6.	@ annas 6.	@ annas 6.
Grain	2,70,212 1 9	4,43,484 15 8	4,67,041 1 4	4,96,970 4 8	4,28,562 8 5	4,35,874 6 9	6,37,104 4 0	5,62,407 12 1	6,24,658 10 4	6,33,975 9 11
	@ annas 3.	@ annas 4½.	@ annas 4½.	@ annas 4½.	@ annas 4½.	@ annas 4½.	@ annas 4½.	@ annas 4½.	@ annas 4½.	@ annas 4½.
Flour	—15,267 7 0	—26,023 5 0	—32,597 0 3	—33,911 15 0	—27,921 5 0	—37,985 1 0	—41,744 7 0	—66,917 11 0	—85,338 1 6	—56,194 5 0
	@ annas 4.	@ annas 4.	@ annas 4.	@ annas 4.	@ annas 4.	@ annas 4.	@ annas 4.	@ annas 4.	@ annas 4	@ annas 4.
Wines and Spirits ...	2,37,077 4 5	2,38,315 5 0	2,20,332 11 1	2,29,366 0 10	2,24,814 11 9	2,34,402 3 9	2,46,021 5 6	2,75,935 2 4	2,91,689 12 7	2,37,731 15 7
	@ pies 6.	@ pies 6.	@ pies 6.	@ pies 6.	@ pies 6.	@ pies 6.	@ pies 6.	@ pies 6.	@ pies 6.	@ pies 6.
Beer	12,858 2 7	11,293 15 0	11,518 1 3	10,217 10 5	15,216 6 4	14,359 8 5	13,189 7 6	23,578 14 5	19,792 8 0	22,927 7 11

	@ annas 8.	@ annas 8.	@ annas 8.	@ annas 8.	@ annas 8.	@ annas 8.	@ annas 8.	@ annas 8.	@ annas 8.	@ annas 8.
Sugar...	4,38,451 8 3	4,46,837 7 8	1,49,829 15 1	6,20,853 11 2	5,56,178 9 9	—1,23,089 10 3	5,59,283 8 7	3,73,017 3 6	5,37,049 1 8	3,41,438 10 6
	@ annas 10.	@ annas 10.	@ annas 10.	@ annas 10.	@ annas 10.	@ annas 10.	@ annas 10.	@ annas 10.	@ annas 10.	@ annas 10.
Ghee	2,45,195 1 10	2,54,687 13 2	2,69,599 15 6	2,37,877 2 6	2,55,818 1 0	2,62,513 3 9	2,79,053 0 3	2,64,306 9 0	3,40,852 9 10	2,16,521 14 3
	@ 2½%	@ 2½%	@ 2½%	@ 2½%	@ 2½%	@ 2½%	@ 2½%	@ 2½%	@ 2½%	@ 2½%
Timber	1,74,592 10 10	1,53,324 14 5	1,95,427 10 10	1,70,192 13 2	2,09,486 8 6	1,98,770 0 0	2,05,571 2 4	3,45,539 0 11	3,98,020 12 2	2,28,983 12 1
	.....	@ annas 2.	@ annas 2.	@ annas 2.	@ annas 2.	@ annas 2.	@ annas 2.	@ annas 2.	@ annas 2.	@ annas 2.
Firewood	.....	70,248 5 1	72,056 1 10	70,327 10 8	69,738 3 9	60,844 9 6	68,179 10 6	65,392 4 6	85,369 2 6	93,423 15 6
Total Rs...	13,63,119 6 8	15,92,169 7 0	13,53,208 8 8	17,31,893 6 5	17,16,893 12 6	10,45,689 4 11	19,66,657 15 10	18,41,259 3 9	22,12,094 7 2	17,75,003 5 9.

N.B.— This statement shows the net Revenue after deducting from gross collections refunds *passed* for payment by the Deputy Assessor and Town Duty Refund Officer though such refunds may not actually have been fully paid.

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

Appendix

STATEMENT showing the actual Collections, Refunds admitted and Net

ARTICLES.	1914-15.			1915-16.		
	Gross Collections.	Refunds.	Net Revenue.	Gross Collections.	Refunds.	Net Revenue.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Grain	7,76,784 9 9	3,40,910 3 0	4,35,874 6 9	11,08,543 15 0	4,71,439 11 0	6,37,104 4 0
Flour	1,509 12 0	39,494 13 0	—37,985 1 0	1,266 8 0	43,010 15 0	—41,744 7 0
Wines and Spirits	2,68,328 5 9	33,926 2 0	2,34,402 3 9	2,76,014 10 6	29,993 5 0	2,46,021 5 6
Beer	38,223 1 5	23,863 9 0	14,359 8 5	29,793 1 8	16,603 10 0	13,189 7 8
Sugar	9,04,601 15 9	10,27,691 10 0	—1,23,089 10 3	15,48,831 12 7	9,89,548 4 0	5,59,283 8 7
Ghee	3,38,109 11 9	75,596 8 0	2,62,513 3 9	3,92,462 6 3	1,13,409 6 0	2,79,053 0 3
Timber	2,39,354 15 0	40,584 15 0	1,98,770 0 0	2,35,009 2 4	29,438 0 0	2,05,571 2 4
Firewood	60,844 9 6	.....	60,844 9 6	68,179 10 6	.....	68,179 10 6
Total Rs. ...	26,27,757 0 11	15,82,067 12 0	10,45,689 4 11	36,60,101 2 10	16,93,443 3 0	19,66,657 15 10

D. ROBERTSON,
Acting Chief Accountant.

No. 17.

Revenue during the five years from 1914-15 to 1918-19.

1916-17.			1917-18.			1918-19.		
Gross Collections.	Refunds.	Net Revenue.	Gross Collections.	Refunds.	Net Revenue.	Gross Collections.	Refunds.	Net Revenue.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
10,86,650 15 1	5,24,243 3 0	5,62,407 12 1	13,82,173 9 4	7,57,514 15 0	6,24,658 10 4	13,47,243 10 11	7,13,268 1 0	6,33,975 9 11
6,115 2 0	72,032 13 0	—66,917 11 0	28,715 2 6	1,14,053 4 0	—85,338 1 6	6,824 5 0	63,018 10 0	—56,194 5 0
3,04,194 0 4	30,258 14 0	2,73,935 2 4	3,18,752 9 7	27,062 13 0	2,91,689 12 7	2,63,811 15 7	25,580 0 0	2,37,731 15 7
40,701 8 5	17,122 10 0	23,578 14 5	29,811 10 0	10,019 2 0	19,792 8 0	33,093 8 11	10,166 1 0	22,927 7 11
15,55,118 6 6	11,82,101 3 0	3,73,017 3 6	17,42,543 7 3	12,05,491 6 0	5,37,049 1 3	15,75,620 5 6	12,34,181 11 0	3,41,438 10 6
4,54,179 11 0	1,89,873 2 0	2,64,306 9 0	5,45,538 1 10	2,04,685 8 0	3,40,852 9 10	5,14,781 6 3	2,98,259 8 0	2,16,521 14 3
3,72,953 10 11	27,414 10 0	3,45,539 0 11	4,22,481 7 2	24,410 11 0	3,98,020 12 2	2,48,200 8 1	19,216 12 0	2,28,983 12 1
65,392 4 6	.....	65,392 4 6	85,369 2 6	.....	85,369 2 6	1,01,724 10 6	8,300 11 0	93,423 15 6
38,85,305 10 9	30,44,046 7 0	18,41,259 3 9	45,55,935 2 2	23,43,240 11 0	22,12,094 7 2	40,90,800 6 9	23,71, 991 6 0	17,75,008 5 9

P. W. MONIE,

Municipal Commissioner.

Appendix

Statement showing Town Duty Collections from each source month by month with

MONTH.	Grain and Pulse.		Flour of all sorts.		Wines and Spirits.		Beer.	
Duty Collected by	1917-18.	1918-19.	1917-18.	1918-19.	1917-18.	1918-19.	1917-18.	1918-19.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.
BOMBAY PORT TRUST.								
April	34,107 3 6	14,766 12 0	....	1 11 0	20,555 4 9	7,607 4 9	1,689 15 0	3,225 0 0
May	22,949 0 3	9,453 2 11	150 9 0	....	21,597 5 0	15,684 15 3	2,352 3 3	889 9 0
June	27,252 10 0	46,472 10 3	11 0 6	....	2a,436 10 9	4,394 14 5	1,797 14 0	1,232 10 9
July	32,540 8 6	5,163 1 6	66 11 6	....	21,127 12 0	41,811 9 6	1,304 10 0	4,649 6 9
August	14,581 12 3	20,617 14 3	259 15 0	....	28,579 0 11	5,689 8 8	1,461 15 3	1,332 13 0
September	19,548 3 6	20,650 13 3	87 11 0	....	28,899 5 8	11,946 14 0	2,249 15 6	1,803 12 6
October	7,782 11 6	16,271 3 6	0 13 0	....	27,025 14 4	15,127 12 2	1,366 9 4	2,110 14 5
November	12,764 1 1	53,775 3 0	1 8 0	6 2 6	25,9 9 2 10	6,850 3 3	1,554 4 7	2,079 6 0
December	24,608 15 9	53,220 12 0	....	5 13 0	28,927 11 6	10 556 3 7	3,224 4 3	2,889 12 0
January	16,829 8 2	65,059 12 6	0 7 6	....	26,562 5 8	15 152 7 5	3,629 8 5	2,3 4 13 0
February	15,889 8 8	78,619 7 9	....	....	23,194 8 10	7,978 12 1	2,368 8 0	876 5 10
March	4,909 7 2	1,16,001 9 3	0 3 0	....	31,139 1 4	7,945 10 9	291 9 5	3 051 8 8
Total ..	2,33,218 10 4	5,90,172 6 2	608 14 6	13 10 0	3,05,954 3 7	1,50,446 3 10	23.261 5 0	26,506 0 11
G. I. P. RAILWAY.								
April	90,274 1 0	54,495 2 3	531 15 0	255 13 0	225 8 0	507 14 0	119 0 0	253 8 0
May	77,441 11 0	94 173 11 0	120 9 0	....	276 0 0	474 13 0	26 1 0	164 4 0
June	1,02 297 13 0	77,742 7 0	30 10 0	....	35 8 0	225 8 0	265 0 0	327 8 0
July	50,147 5 0	49,021 13 0	....	....	17 8 0	187 0 0	260 0 0	198 8 0
August	33,669 8 0	75,553 0 0	511 2 0	464 3 0	308 12 0	121 0 0	521 10 0	325 0 0
September	42,381 6 0	1,02,371 2 0	894 13 0	..	336 0 0	718 12 0	587 8 0	1,092 0 0
October	75,149 14 0	56,366 4 0	371 9 0	677 4 0	209 8 0	337 8 0	538 12 0	357 8 0
November	1,02,481 5 0	11,407 8 0	307 14 0	404 6 0	299 4 0	379 0 0	195 4 0	138 0 0
December	65,110 5 9	8,240 7 0	47 8 0	12 2 0	420 8 0	304 7 0	583 14 0	463 2 0
January	1,08,812 8 0	10,778 15 0	1 11 0	1.7 1 0	145 14 0	62,387 2 0	325 0 0	585 0 0
February	47 613 3 0	14,205 4 0	19 3 0	344 1 0	407 8 0	382 0 0	590 0 0	585 0 0
March	55,400 13 0	20,565 4 0	....	875 11 0	1,032 1 0	31,734 6 9	260 0 0	498 6 0
Total ..	8,48,670 12 0	5,44,360 13 9	2,836 14 0	3,150 9 0	3,713 15 0	98,210 6 9	4306 1 0	4,992 7 0
B. B. & C. I. RAILWAY.								
April	27,911 1 0	27,034 0 0	3,823 5 0	119 6 0	621 8 0	1,303 4 0	113 8 0	98 5 0
May	34,703 12 0	31,712 0 0	2,444 14 0	101 9 0	412 4 0	1,386 6 0	238 3 0	202 9 0
June	37,076 15 0	37,246 11 0	910 15 0	192 14 0	716 0 0	993 12 0	64 1 0	203 9 0
July	27,935 9 0	36,538 12 0	1,699 5 0	205 12 0	6 4 12 0	1,464 0 0	200 13 0	99 11 0
August	13,603 1 0	22,218 2 0	1,813 14 0	222 4 0	6 8 15 0	1,996 8 0	133 5 0	134 1 0
September	11,072 11 0	29,808 10 0	3,276 14 0	381 14 0	418 0 0	1,747 0 0	195 10 0	166 2 0
October	11,602 0 0	24,606 10 0	3,939 5 0	163 0 0	646 0 0	1,420 12 0	284 1 0	84 6 0
November	26,984 5 0	9,015 11 0	2,742 12 0	198 8 0	747 12 0	1,333 7 0	276 2 0	60 8 0
December	25,575 0 0	14,804 4 0	2,299 8 0	250 6 0	926 0 0	712 8 0	259 1 0	165 0 0
January..	36,260 14 0	22,013 11 0	1934 5 0	551 13 0	838 8 0	540 4 0	158 7 0	167 0 0
February	26,997 5 0	14,317 1 0	231 1 0	768 3 0	1,232 12 0	763 4 0	65 5 0	97 7 0
March	20,561 10 0	32,894 15 0	153 4 0	504 9 0	1,192 0 0	994 4 0	255 12 0	167 0 0
Total ..	3,00,284 8 0	3,0:,210 7 0	25,269 6 0	3,660 2 0	9,084 7 0	14,655 5 0	2.244 4 0	1,595 1 0
GRAND TOTAL ..	13,82,173 9 4	13,47,243 10 11	28,715 2 6	6,824 5 0	3,18,752 9 7	2,63,311 15 7	29,811 10 0	33,093 9 11
Deduct— REFUNDS PASSED BY THE DEPUTY ASSESSOR AND TOWN DUTY REFUND OFFICER.	7,57,514 15 0	7,13,268 1 0	1,14,053 4 0	63,018 10 0	27,062 13 0	25,580 9 0	10,019 2 0	10,166 1 0
NET REVENUE ..	6,24,658 10 4	6,33,975 9 11	—85,338 1 6	—56,194 5 0	2,91,689 12 7	2,37,731 15 7	19,792 8 0	22,927 7 11

* Revenue from Town Duty—

	Rs. a. p.
For 1917-1918	22,12,094 7 2
For 1918-1919	17,18,809 0 9
Decrease ..	Rs. 4,93,285 6 5

Deduct—Refunds admitted by the Deputy Assessor & T. D. R. Officer for 1917-18 .. .. Rs. 23,43,240 11 0
Refunds passed by the Accounts Office in 1917-18 .. .. „ 24 14,172 1 0

Difference .. Rs. 70,927 6 0

Difference between collections payable on 1st April 1917 Rs. 45,434 12 2
„ „ „ „ „ 1918 „ 1,59,644 4 0
Rs. 1,14,209 7 10

Deduct—Difference between the amount credited in 1917-18 .. Rs. 33,740 9 11
„ „ „ in 1918-19 .. „ 20,583 7 6
33,357 2 5

1,00,852 5 5

1,71,789 13 5

Refunds admitted by the Dy. Assr. & T. D. R. Officer for 1918-19 .. Rs. 23,71,991 6 6
Refunds passed by the Account Office in 1918-19 .. .. .. „ 22 57,723 15 0
Difference .. Rs. 1,14,267 7 6
1,14,267 7 6

Add—Difference between collections payable on 1st April 1918- Rs. 1,59,644 4 0
„ „ „ „ „ 1919 „ 39,607 5 4
1,20,036 14 8

Deduct—Difference between the amount credited in 1918-19 .. Rs. 19,778 13 4
„ „ „ „ „ 1919-20 .. „ 21,248 1 10
1,469 4 6
1,21,506 3 2

D. ROBERTSON,
Acting Chief Accountant.

No. 18.

the refunds admitted for the year 1918-19 as contrasted with those for the year 1917-18.

Sugar.		Ghee.		Timber.		Firewood.		Total monthly collection.	
1917-18.	1918-19.	1917-18.	1918-19.	1917-18.	1918-19.	1917-18.	1918-19.	1917-18.	1918-19.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1,21,663 15 6	2,36,523 4 3	8,926 8 3	16,866 1 6	47,209 14 11	20,308 0 9	9,277 8 0	8,505 14 6	2,43,433 5 11	3,07,814 0 9
1,19,659 5 6	6,307 1 9	11,760 4 0	66 9 9	66,305 7 7	24,253 9 10	5,507 2 0	6,983 4 0	2,49,351 4 7	61 638 4 6
10,843 8 6	99,420 14 0	2,033 13 6	2,050 9 9	16,967 0 3	15,117 14 0	2,112 4 0	221 9 0	83,454 13 6	1,68,911 2 2
64,206 8 0	1,13,398 15 7	2,301 6 0	81 7 9	19,166 11 8	15,534 2 3	27 6 0	35 7 0	1,40,971 9 8	1,80,674 2 4
1,18,081 2 6	46 705. 1 0	8,372 7 0	907 15 9	19,927 9 11	9,400 3 2	27 6 0	32 1 0	1,91,291 4 10	84,645 8 10
91,205 0 3	12,787 6 0	9,211 9 0	7,100 6 3	4,390 5 1	19,157 10 5	114 4 0	289 4 0	1,56,056 6 0	84,756 2 5
2,01,571 13 6	1,35,080 15 3	10,595 6 3	7,105 3 9	73,208 6 6	5,675 5 2	1,695 6 6	2,617 10 0	3,23,257 0 11	1,84,089 1 3
61,146 14 9	89,941 13 0	11,998 14 9	2,237 15 9	23,158 8 5	13,872 2 11	3,734 11 0	1,797 8 0	1,40,258 1 5	1,70,560 5 11
1,91,927 1 0	1,84,619 5 2	12,408 11 7	12,050 2 3	11,025 13 5	13,548 15 8	3,695 9 0	4,039 13 6	2,75,873 2 6	2,81,716 0 2
2,16,654 11 9	2,61,672 13 9	19,037 7 0	10,878 2 6	34,544 0 6	29,114 4 5	5,534 13 0	7,608 7 0	3,22,792 14 0	3,91,846 9 7
59,812 2 6	69,591 15 9	12,950 14 9	11,315 2 3	35,189 1 4	16,023 10 7	6,650 14 6	5,255 12 0	1,55,855 10 1	1,89,661 2 3
2,18,960 12 6	78,807 15 6	13,482 1 3	9,727 13 9	40,928 13 7	32,639 7 5	7,461 11 0	7,077 2 6	3,17,163 11 3	2,55,251 3 10
14,75,586 0 3	13,54,848 9 0	1,23,069 7 4	80,447 11 0	3,92,221 13 2	2,03,645 6 7	45,835 14 6	44,463 12 6	25,99,759 4 8	23,60,543 12 0
8,195 7 0	9,016 7 0	14,984 0 6	10,231 11 6	568 13 0	918 14 0	120 9 0	849 0 0	1,15,019 5 6	76,533 6 3
17,768 1 0	10,748 15 0	15,700 9 3	8,615 4 6	505 4 0	1,943 1 0	122 11 0	1,046 10 0	1,12,194 14 3	1,17,161 10 6
5,628 4 0	11,027 12 0	13,806 15 3	6,916 0 0	326 14 0	3,191 12 0	110 9 0	215 9 0	1,22,501 9 3	99,046 8 0
8,235 1 0	31,573 0 0	12,985 10 3	7,867 1 0	966 0 0	5,077 6 0	243 14 0	885 12 0	72,855 6 3	94,760 3 0
11,459 12 0	38,712 5 0	21,892 10 6	22,088 13 9	1,441 6 0	5,413 5 0	353 7 0	442 0 0	70,158 3 6	1,43,119 10 9
29,791 4 0	42,992 1 0	21,305 13 0	19,987 14 0	487 15 0	7,000 0 0	141 6 0	394 8 0	95,926 1 0	1,74,556 5 0
39,923 4 0	38,493 0 0	25,551 11 9	14,810 4 3	849 0 0	1,997 1 0	76 0 0	198 2 0	1,43,660 10 9	53,176 15 3
67,939 10 0	13,120 7 6	20,712 7 9	5,491 8 0	1,361 2 0	1,536 10 0	115 4 0	121 6 0	1,93,412 2 9	32,598 13 6
27,708 12 0	6,683 7 0	18,539 0 3	19,677 1 9	2,655 0 0	1,618 5 0	128 12 0	531 15 0	1,15,193 11 3	37,592 14 9
28,419 5 0	4,277 2 0	19,722 15 9	7,396 5 9	1 500 12 0	2,620 8 0	92 0 0	170 12 0	1,59,020 1 9	88,782 13 9
11,895 5 0	4,789 8 0	27,890 2 3	5 686 14 3	2,932 7 0	2,433 12 0	888 12 0	243 9 0	91,936 8 3	28,671 0 3
8,390 1 0	6,584 2 0	17,426 12 9	9,231 0 3	1,718 10 0	799 5 0	804 2 0	125 8 0	84,533 7 9	70,403 11 0
2,65,354 2 0	2,18,013 2 6	2,33,518 13 3	1,37,999 15 0	15,313 3 0	34,601 15 0	2,697 6 0	5,174 11 0	13,76,411 2 3	10,47,004 0 0
4 7 0	103 15 0	5,260 11 0	30,218 12 0	943 12 0	546 0 0	513 14 0	5,872 12 0	39,192 2 0	65,326 6 0
7 11 0	336 10 0	7,465 9 0	22,103 4 0	33 0 0	389 10 0	475 12 0	5,579 3 0	45,781 1 0	61,612 10 0
108 12 0	148 12 0	8,205 9 0	14,761 4 0	1,184 6 0	1,196 4 0	736 8 0	6,148 9 0	48,998 2 0	70,891 11 0
0 9 0	6 12 0	27,227 2 9	36,193 0 3	1,078 3 0	662 2 0	2,596 14 0	6,465 14 0	61,413 3 9	81,635 15 3
10 10 0	300 10 0	18,119 13 0	41,630 14 0	1,573 4 0	771 8 0	3,436 10 0	5,288 6 0	39,299 8 0	75,562 5 0
....	446 2 0	10,122 6 0	50,596 10 0	405 0 0	369 6 0	2,106 10 0	4,403 6 0	27,597 3 0	87,919 2 0
....	206 7 0	20,828 3 0	28,893 13 0	280 1 0	706 8 6	3-155 6 0	3,648 12 6	40,735 0 0	59,680 4 6
....	148 2 0	17,331 12 0	8,501 15 0	784 1 0	1,264 8 0	3,236 2 0	3,158 7 0	52,102 14 0	23,681 2 0
....	198 5 0	13,787 8 0	16,1.2 10 0	905 9 0	1,300 14 0	4,135 6 0	2,488 8 0	47,888 0 0	35,942 7 0
771 15 0	435 11 0	19,176 8 6	12,542 8 0	3,134 2 0	498 10 0	5,935 14 0	3,757 10 0	68,261 0 6	40,507 3 0
428 12 0	106 3 0	16,264 7 0	9,328 16 0	4,143 14 0	406 6 0	4,063 8 0	3,055 4 0	53,425 0 0	28,842 11 0
277 9 0	409 1 0	25,160 4 0	12,420 3 0	430 12 0	1,841 6 0	6,440 6 0	2,419 8 0	54,471 9 0	51,650 14 0
1,603 5 0	2,758 10 0	1,88,949 13 3	2,96,383 12 3	14,896 7 0	9,953 2 6	36,832 14 0	52,086 3 0	5,79,164 11 3	6,33,252 10 9
17,42,543 7 3	15,75,620 5 6	5,45,538 1 10	5,14,781 6 3	4,22,431 7 2	2,48,200 8 1	85,369 2 6	1,01,724 10 6	45,55,335 2 2	40,90,800 6 9
12,05,494 6 0	12,34,181 11 0	2,04,685 8 0	2,98,259 8 0	24,410 11 0	19,216 12 1	....	8,300 11 0	23,43,240 11 0	23,71,991 6 0
5,37,049 1 3	3,41,438 10 6	3,40,852 9 10	2,16,521 14 3	3,98,020 12 2	2,28,983 12 1	85,369 2 6	93,423 15 6	*22,12,094 7 2	17,15,003 5 9

Rs. a. p.

3,21,495 11 0

2,35,773 10 2

85,722 0 10 Decrease shown in Appendix No. 1.

P. W. MONIE,
Municipal Commissioner.

Appendix No. 19.

STATEMENT showing (1) the Grants sanctioned for New Works, (2) the Expenditure incurred on them, and (3) the Balances of the grants remaining unexpended, which have been renewed for expenditure during 1919-20.

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918 19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.
	I—General Superintendence.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	Constructing the Municipal Commissioner's record room into Office accommodation ...	.....	7,000 0 0	.....	495 8 0	.....	6,504 8 0
2	Construction of a fire-proof petrol shed for 100 gallons in the Municipal Office compound	393 8 2	.....	.....	.....	273 0 0	.....
	Total Rs. ...	393 8 2	7,000 0 0	.....	495 8 0	273 0 0	6,504 8 0
	II—Assessment and Collection.						
3	Constructing a new Toll Chowki at Sion	3,430 0 0	.....	17 8 0	.....	2,744 0 0	.....
4	Providing an iron shed to enable the F Ward Superintendent to inspect carts entering the City from Salssette at night...	99 0 0	.....	76 0 1	.....	.....	.....
	Total Rs. ...	3,529 0 0	.....	93 8 1	.....	2,744 0 0	.....
	III—Fire Brigade.						
5	Construction of a wall along the road side of the Haines Road Fire Brigade Station Compound	215 0 0	.....	214 14 6	.....	.....	.....
6	Construction of a fire-proof shed for storing 500 gallons of petrol at the Head Quarters, Fire Brigade, Sankli Tank ...	775 10 6	.....	.....	.....	775 10 6	.....
	Total Rs. ...	990 10 6	.....	214 14 6	.....	775 10 6	.....
	IV—Public Gardens, including Victoria and Albert Museum.						
7	Raising and altering the small Masonry tank used for watering the Gardens	400 0 0	.....	219 0 10	.....	180 0 0	.....
8	Providing a raised platform at the Chowpatti Bandstand ...	6.8 5 3	.....	238 12 3	.....	.....	.....
9	Providing and fitting W. I. grills to the windows of the Victoria and Albert Museum in the Victoria Gardens ...	5,817 3 2	.....	4,878 15 4	.....	.....	.....
10	Covering a wall in the Gardens.	1,774 0 0	.....	1,506 10 8	.....	.....	.....
11	Providing expanded metal to the C. I. Railing to the Parel Road side, between Mallies' quarters and the Garden compound at the Victoria Gardens	5,993 0 0	.....	1,000 12 1	.....	4,992 0 0	.....
	Total Rs. ...	14,612 8 5	.....	7,794 12 2	.....	5,172 0 0	.....
	VI—Mechanical Branch.						
12	Substituting electrically driven Stereophagus Pumps for Shone's Ejector at No. I Ejector Station, Agripada ...	2,571 13 7	.....	.....	.....	2,571 13 7	.....
13	Construction of fire resisting petrol and carbide Stores for the Municipal Workshops at Foras Road	.....	4,850 0 0	.....	.....	.....	4,850 0 0
	Total Rs ...	2,571 13 7	4,850 0 0	.....	.....	2,571 13 7	4,850 0 0
	Carried over Rs....	29,097 8 8	11,850 0 0	8,103 2 9	495 8 0	11,536 8 1	11,354 8 0

Appendix No. 19—*continued.*

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Brought forward Rs. ...	22,097 8 8	11,850 0 0	8,103 2 9	495 8 0	11,536 8 1	11,354 8 0
	VIII—Miscellaneous—Drainage and Sluices.						
14	Reserve for Petty Drainage Works	1,640 0 0	21,989 0 0	1,640 0 0	12,449 11 7	.....	7,829 0 0
15	Relieving arches at Falkland Road	502 1 8	5,000 0 0	502 1 8	4,998 13 8	.....	.....
16	Permanent manholes over drains	783 0 2	3,000 0 0	783 0 2	1,421 13 6	.....	1,578 0 0
17	Providing a covered storm-water drain in Victoria 3rd Cross Lane	.....	6,597 0 0	.....	5,846 0 9	.....	.....
18	Constructing a covered masonry storm-water drain with water gullies and water tables in Dadyset Agiary Street from Cathedral Street to Kalbadevi Road	.....	9,352 0 0	.....	6,621 10 2	.....	20 0 0
19	Laying a 9" pipe sewer in the passage to the east of Parel Tank Road	.....	7,595 0 0	.....	.....	.....	7,595 0 0
20	Providing a 6" pipe drain with Inspection Chambers at the rear of eighteen premises on Municipal land at Dongri Street	.....	1,731 0 0	.....	.....	.....	1,731 0 0
21	Extending 9" pipe sewer in the Ghorupdeo Cross Passage from the existing manholes in front of N. S. Depot 300 ft. towards the entrance	.....	3,516 0 0	.....	72 6 5	.....	3,443 0 0
22	Extending 9" pipe sewer in Mu-jid Bunder Siding Road from Argyle Road to Clive 6 Road	.....	7,710 0 0	.....	35 2 0	.....	7,674 0 0
23	Providing storm-water drain with half-sized water entrances and water tabels in a portion at Mahmedan Street	.....	5,092 0 0	.....	343 11 0	.....	4,748 0 0
24	Laying a 9" pipe sewer in Reay Road North of Wadi Bunder to a distance of 735 feet ...	.....	9,762 0 0	.....	5,060 13 8	.....	2,635 0 0
25	Providing a storm water drain with two water entrances in Outram Road	.....	2,679 0 0	.....	265 3 1	.....	2,039 0 0
26	Covering with Water Iron plate the flushing chamber at the junction of Forjett Street and Tardeo Road	.....	2,809 0 0	.....	1,661 5 9	.....	25 0 0
27	Providing a covered masonry storm water drain in Khetwadi 6th Lane...	.....	5,119 0 0	.....	4,650 12 2	.....	5 0 0
28	Providing a covered masonry storm-water drain in Khetwadi 8th Lane	.....	7,470 0 0	.....	7,314 2 3	.....	5 0 0
29	Providing storm water drain with water gullies and water tables in Charni Road and part of Girgam Back Road ...	.....	12,718 0 0	.....	5,511 10 5	.....	6,324 0 0
30	Constructing storm-water drain with two manholes and a full sized water entrance at Falkland Road Low Level Road ...	.....	3,214 0 0	.....	2,244 15 10	.....	969 0 0
31	Providing a 12" pipe storm-water drain along Hospital Lane to join the North end of Frere Road	.....	11,999 0 0	.....	6,041 7 8	.....	3,671 0 0
	Miscellaneous—Drainage and Sluices—Carried over Rs. ...	2,925 1 10	1,27,352 0 0	2,925 1 10	64,539 11 11	.....	50,341 0 0
	Carried over Rs. ...	22,097 8 8	11,850 0 0	8,103 2	495 8 0	11,536 8 1	11,354 8 0

Appendix No. 19—*continued.*

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Brought forward Rs. ...	22,097 8 8	11,850 0 0	8,103 2 9	495 8 0	11,536 8 1	11,354 8 0
	Miscellaneous—Drainage and Sluices—Brought forward...	2,925 1 10	1,27,852 0 0	2,925 1 10	64,539 11 11	.....	50,341 0 0
	VIII—Miscellaneous—Drainage and Sluices —*contd.*						
32	Providing storm-water drain with manholes at Cavel Street	.....	7,762 0 0	.....	7,718 6 8	.....	20 0 0
33	Providing half sized water entrances in Alli Ummar Street	.....	6,685 0 0	.....	4,140 5 9	.....	4 0 0
34	Providing half-sized water entrances in Musjid Street ...	.....	6,521 0 0	.....	4,623 5 9	.....	4 0 0
35	Providing a covered storm-water drain with water entrances and manholes from near premises No. 20 Nepean Sea Road to join the existing drain in Narayan Dabholker Road ,,,	.....	4,849 0 0	.....	1,675 12 2	.....	3,171 0 0
36	Providing new pattern water entrances in Kazi Street ...	.....	4 0 0	.....	.....	.....	.....
37	Providing half-sized water entrances and six manholes in Lamington Road between Falkland Road and Foras Road	.....	3,482 0 0	.....	2,972 6 5	.....	509 0 0
38	Affirming 9,24" connections in place of 12" connection to the main sewer at Worli near Pumping Station ...	.....	3,598 0 0	.....	.....	.....	3,598 0 0
39	Removing the existing openside drain and providing a 6" pipe drain connecting each of the premises directly with the 6" pipe drain in common house gully between Abdul Rahiman Street and Sarang Street north of Janjikar Street and south of Bhajipala Lane ...	3,467 7 5	.....	1,616 6 7	.....	.....	.....
40	Channelling and pitching a portion of watercourse No. 75 on the west of the Elphinstone Road Station	235 10 0	.....	233 9 5	.....	.....	.....
41	Removing the existing openside drain and providing a 6" pipe drain and connecting house drainage fittings of the premises in the common house gully between Memonwada Road and Nagdevi Street and South of Bhajipala Street and north of Janjikar Street ...	1,515 2 9	.....	735 13 10	.....	.....	.....
42	Laying a 15" pipe sewer at Club Road from Morcland Road to the new Ovoid sewer in Lamington Road	297 10 8	.....	Cr. 85 3 7	.....	.....	.....
43	Laying a 9" pipe sewer from Messrs. Godrej and Boyce's safe Factory to DeLisle Road Sewer	2,122 10 11	.....	1,963 2 6	.....	.....	.....
44	Providing a 12" storm water drain in a portion of Currey Road near its junction with DeLisle Road	752 14 10	.....	96 12 8	.....	.....	.....
45	Extension of the existing 9" pipe sewer in Worli Road ...	2,767 12 8	.....	2,677 11 0	.....	.....	.....
	Miscellaneous—Drainage and Sluices—Carried over Rs. ...	14,184 7 1	1,60,253 0 0	10,203 6 3	85,670 0 3	.....	57,647 0 0
	Carried over Rs. ...	22,097 8 8	11,850 0 0	8,103 2 9	495 8 0	11,536 8 1	11,354 8 0

Appendix No. 19—*continued.*

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19	For 1918-19.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Brought forward Rs....	22,097 8 8	11,850 0 0	8,103 2 9	495 8 0	11,536 8 1	11,354 8 0
	Miscellaneous—Drainage and Sluices—Brought forward Rs	14,184 7 1	1,60,253 0 0	10,2[illegible]3 6	85,670 0 5	.. ..	57,647 0 0
	VIII—Miscellaneous—Drainage and Sluices *—concld.*						
46	Constructing a storm water masonry dhapa drain in a portion of Sir Road	1,013 0 0	.....	1,012 10 6	.....	.....	.....
47	Construction of a shed for a Motor Silt Waggon	670 0 0	....	669 14 7	.....	.....	.....
48	Providing a short length circular storm water drain connecting the Moreland Road storm water drain to the head manhole of the Ripon Road drain.	1,000 0 0	... .	940 1 8	.....	.....	.....
49	Providing a covered masonry storm water drain in 73, Khetwadi Lane	1,000 0 0	.....	840 10 1	.....	.....	.....
50	Providing a covered storm water drain with water entrances and water tables in 123 Khetwadi Lane between Khetwadi Main Road and Back Road ...	2,700 0 0	.....	2,455 15 11	.....	.....	.....
51	Providing an open and covered side drain with manholes at Lady Jamshedji Road from Chapra Building to the existing Road	28 4 8	.. ..	.....	.....	.....	.....
52	Providing open road side drain from Dr. Dhuru's Dispensay to Mr. Chankar's premises in Portuguese Church Road ...	1,270 6 2	.....	1,170 1 7	.....	.....	.....
53	Laying a 6" pipe drain in Lohar Chawl Street, Mahim Bazar Road	1,537 0 0	....	901 7 6	.....	... .	.....
54	Laying a 9" pipe sewer in Vanzarwadi passage at Mahim	.....	7,250 0 0	....	... .	.....	7,250 0 0
55	Laying a 9" pipe sewer at Mahomedan Street	....	2,545 0 0	.....	.....	.....	2,545 0 0
56	Laying a 9" pipe sewer at Ghelabhai Street	.....	3,154 0 0	.....	.....	.....	3,154 0 0
	Total Rs. ...	23,403 1 11	1,73,202 0 0	18,194 4 1	85,670 0 3	.....	70,596 0 0
	IX—Streets and Buildings.						
57	Converting the Northbrook Garden into a play ground for children	9,538 0 10	.....	3,047 2 10	.....	6,490 0 0	....
58	Converting the Falkland Road Garden into a play ground for children	2,727 7 3	... .	601 6 5	.. ..	2,100 0 0	.....
59	Improving the gradient of a portion of Musjid Bunder Road	20,697 15 2	.....	9,329 13 11	.....	11,368 0 0	.....
60	Remodelling as an experimental measure with cement concrete bottoming, &c. the portion of Frere Road in front of the main gates of the Princess Docks from Kalyan Street to Masjid siding	11,596 7 6	....	3,353 4 1	.....	8,244 0 0	.....
	Streets and Buildings—Carried over Rs. ...	44,559 14 9	.....	16,330 10 3	.....	28,202 0 0	.....
	Carried over Rs. ...	45,500 10 7	1,85,052 0 0	26,297 6 10	86,165 8 3	11,536 8 1	81,950 8 0

Appendix No. 19—*continued.*

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Brought forward Rs. ...	45,500 10 7	1,85,052 0 0	26,297 6 10	86,165 8 3	11,536 8 1	81,950 8 0
	Streets and Buildings—Brought forward Rs. ...	44,559 14 9	.....	16,330 10 3	.....	28,202 0 0	
	IX—Streets and Buildings—*contd.*						
61	Improving the gradients of Worli Road	12,430 0 0	.....	12,429 13 11	.....	.....	.....
62	Improvement of Bhatia Bag ...	3,552 8 0	.....	3,551 4 1	.....	.....	.....
63	Providing kerosine oil tanks at different Ward Chowkies ...	2,664 0 0	.....	2,664 0 0	.....	.....	.....
64	Acquisition of land for a new road from Cadell Road towards the H ndoo Burning Ground at Mahim.	1,004 0 0	.....	.....	.....	.....	.....
65	Development of land acquired at Golanji Hill Road for Stone Depot	6,010 12 6	.....	16 2 3	.....	5,994 0 0	.....
66	Construction of a new flight of steps leading to the Elpinstone Road Bridge	.....	4,933 0 0	.....	.....	.....	4,933 0 0
67	Putting up 5 water parts for better watering of roads in G Ward	.....	3,345 0 0	.....	23 4 6	.....	2,600 0 0
68	Putting up a railing in front of Municipal land at the Mahaluxmi Loading Sidings and planting trees and shrubs etc..	1,775 12 0	.....	1,328 5 11	.....	.....	.....
	Total Rs. ...	71,996 15 3	8,278 0 0	36,320 4 5	23 4 0	34,196 0 0	7,533 0 0
	X—Water Works.						
69	Acquisition of a plot of land at Ghatkoper and removing and reconstructing the existing Water Works Inspector's office, store yard, and workshops, from Kurla to Ghatkopar	13,228 8 9	.....	12,919 10 9	.....	.....	.....
70	Construction of a new chawl at Kirol for Labourers	2,558 9 6	.....	2,471 11 4	.....	.....	.....
71	Laying water mains in the Chowpati Estate	219 0 4	.....	27 12 11	.....	.....	.....
72	Filling in the low lying ground at Manmala Tank Road, Mahim	8,786 0 0	6,014 0 0	1,531 7 2	.....	7,251 0 0	6,014 0 0
73	Laying a 6" main from the Malabar Hill Reservoir to connect the 6" main in the Nepean Sea Road	2,832 13 6	.....	2,247 3 8	.....	585 0 0	
74	Laying a 5" main in Mint Road.	92 15 2	.....	4 2 0	.....	.....	.....
75	Laying a 5" main in the low-level road at Frere Bridge, to connect the 4" main in Tardeo Road	2,445 0 0	.....	1,030 3 11	.....	1,414 0 0	.....
76	Laying a 5" water main to connect 4" main in New Souter Street with 6" main in Ripon Road	.....	1,430 0 0	.....	690 12 5	.....	.....
77	Laying small mains at Bhundarwada Reservoir and providing small storage tanks for the same	115 9 0	.....	.....	.....	.....	.....
78	Laying a 6" main in Haines Road from the 21" Tulsi main to Messrs. Duncan Stratton's Factory	1,836 12 3	.....	.....	.....	1,836 0 0	.....
	Water Works—Carried over Rs.	32,115 4 6	7,444 0 0	20,252 3 9	690 12 5	11,080 0 0	6,014 0 0
	Carried over Rs. ...	1,17,497 9 10	1,93,330 0 0	62,617 11 3	86,168 12 3	45,732 8 1	89,483 8 0

Appendix No. 19—*continued.*

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Brought forward Rs.	1,17,497 9 10	1,93,330 0 0	62,617 11 3	86,188 12 3	45,732 8 1	89,483 8 0
	Water Works—Brought forward Rs. ...	32,115 4 6	7,444 0 0	20,232 3 9	690 12 5	11,089 0 0	6,014 0 0
	X—Water Works—*concld.*						
79	Lowering 12″ main in Ridge Road	.....	16,300 0 0	.....	13,364 14 3	.....	2,935 0 0
80	Constructing a small cabin in Municipal Land at the junction of Vincent and Sion Road ...	.....	164 0 0	.....	.....	.....	.....
81	Constructing a Scendial Obelise at Bhandarwada Reservoir ...	.....	544 0 0	.....	.....	.....	544 0 0
82	Replacing 3″ and 4″ main in Mazbarpakhadi Road by 6″ main	.....	9,625 0 0	.....	.....	.....	9,625 0 0
	Total Rs. ...	32,115 4 6	34,077 0 0	20,232 3 9	14,055 10 8	11,089 0 0	19,118 0 0
	XI—Public Health.						
83	Paving four cutcha ramps for bullocks to obtain access to the stables in Arthur Road Stables	840 0	.....	839 12 5	.....	.....	.....
84	Providing a tiled roof over the verandah of the Superintendent's quarters at Parel Vaccination Depot	468 0 0	.....	467 11 3	.....	.....	.....
85	Filling in a further portion of Haines Road Cemetery ...	3,641 0 0	.....	3,640 4 4	.....	.....	.....
86	Construction of a shed at Tardeo Flats for the storage of Petrol.	909 0 0	.....	908 12 3	.....	.....	.....
87	Rebuilding of the wards at Maratha Hospital...	4,389 0 0	.....	4,388 0 7	.....	.....	.....
88	Construction of an observation shed, etc. at Sick Bullock Hospital, Sankli Tank	2,209 0 0	.....	2,208 11 5	.....	.....	.....
89	Extension of the verandah, and providing new ventilating plots at Arthur Road Hospital	1,686 0 0	.....	1,685 13 4	.....	.....	.....
90	Providing additional privy accommodation etc., at the Halalkhore huts at Babula Tank	556 0 0	.....	555 3 8	.....	.....	.....
91	Erecting three new temporary wards at Arthur Road Hospital	.....	2,025 0 0	.....	2,024 6 5	.....	.....
92	Constructing new Kutchra Roads within the compound of the skinning ground at Coorla ...	2,023 0 0	.....	1,922 6 6	.....	100 0 0	.....
93	Erecting a Screen round the Skinning ground at Chembur	975 0 0	.....	.....	.....	975 0 0	.....
94	Conversion of old pattern privies and constructing 4 seated latrines and in the compound of Falkland Road Dharamsala.	2,018 0 0	.....	2,017 3 2	.....	.....	.....
95	Construction of two chowkies for the Cemetery Clerks at Tank Bunder and Reay Road.	.....	1,732 0 0	.....	.....	.....	1,732 0 0
96	Refuse loading depot at Bapty Road	4,550 0 0	4,550 0 0	4,550 0 0	1,206 12 5	.....	3,343 0 0
97	Filling in a further portion of low lying ground at the Haines Road Hindu Cemetery.	.....	5,0 0 0 0	.....	4,524 0 7	.....	475 0 0
	Public Health—Carried over Rs. ...	24,264 0 0	13,307 0 0	23,183 14 11	7,755 3 5	1075 0 0	5,550 0 0
	Carried over Rs. ...	1,49,612 14 4	2,27,407 0 0	82,849 15 0	1,00,244 6 11	56,821 8 1	1,08,601 8 0

Appendix No. 19—*continued.*

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918 19.	For 1918-19.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Brought forward Rs. ...	1,49,612 14 4	2,27,407 0 0	82,849 15 0	1,00,244 6 11	56,821 8 1	1,08,601 8 0
	Public Health—Brought forward Rs. ...	24,264 0 0	13,307 0 0	23,183 14 11	7,755 3 5	1,075 0 0	5,550 0 0
	XI—Public Health—*contd.*						
98	Construction of store rooms in the Hindu and Mahomedan Cemeteries at Tank Bunder and Reay Road	.....	2,108 0 0	.....	.....	.....	2,108 0 0
99	Works at Arthur Road Stables—						
	(*a*) Metalling the space behind the night Soil Depot, etc	.....	4,300 0 0	.....	.....	.....	4,300 0 0
	(*b*) Tar maccademing the yard	.....	1,430 0 0	.....	1,430 0 0	.....	.....
	(*c*) Construction of shed for Storing Hay	.....	852 0 0	.....	851 9 6	.....	.....
100	Providing fined glazed ghutters in the roofs of the Kamathi pura Stables	.....	1,317 0 0	.....	1 316 2 10	.....	.....
101	Making a short road to the Health Department Stables at Mori Road	.....	6,497 0 0	.....	327 9 5	.....	6,169 0 0
102	Construction of a shed at the Agripada Stable	.....	.....	.....	.....	.....	.....
103	Providing a 9" stoneware pipe at Agripada Stable	.....	.....	.....	.....	.....	.....
104	Constructing of a trip marker's Chowkey, etc. of the Septic Tank, at Sion	.....	421 0 0	.....	.....	.....	421 0 0
105	Laying a 6" stoneware pipe, etc., at Dharavi Road	.....	485 0 0	.....	470 4 0	.....	.....
106	Providing tar-granted maccadum for F. Ward Stables, Tadar	1,814 7 10	348 0 0	1,814 7 10	347 12 5	.....	.....
107	Bottoming and repairing the roads at Clerk Road Reclamation	.....	8,000 0 0	.....	7,620 3 7	.....	379 0 0
108	Over hauling the semi-permanent wards at Arthur Road Hospital	.....	5,400 0 0	.....	4,227 4 1	.....	1,170 0 0
109	Paving and enclosing Dust bin Stands	163 2 10	200 0 0	94 9 0	.....	68 0 0	200 0 0
110	Constructing a Lethal Chamber at Tardeo Flats	33 0 0	.....	32 4 5	.....	.....	.....
111	Constructing a happer at Worli Night Soil Depot, etc., at Worli Road	.....	2,530 0 0	.....	2,517 0 3	.....	.....
112	Acquiring 5,000 square yards of land for extension of Hindu Cemetery, etc.	.....	5,030 0 0	.....	1,103 10 0	.....	3,926 0 0
113	Construction of Latrines and Urinals	529 0 0	420 0 0	529 0 0	255 9 11	.....	164 6 0
114	Removing Health Camps from Northbrook Garden, etc. ...	.....	235 12 1	.....	235 12 1	.....	.....
115	Erecting a Shed and providing a screen at Katchra Siding Colaba	8,633 0 0	.....	3,591 4 10	.....	5,0 0 0 0	.....
116	Providing expanded metal to all the bays at bullock stables, Arthur Road	2,865 0 0	.....	.....	.....	2,865 0 0	.....
117	Constructing a small improvised crematorium at Sewri Cemetery	5,000 0 0	.....	.....	.....	5,000 0 0	.....
118	Providing wall for protecting Mahim Burning Ground from the in roads of the Sea ...	18,808 0 0	.....	.....	.....	18,808 0 0	.....
	Public Health—carried over Rs. ...	62,109 10 8	52,878 12 1	29,245 9 0	28,458 1 6	32,816 0 0	24,387 6 0
	Carried over Rs.	1,49,612 14 4	2,27,407 0 0	82,849 15 0	1,00,244 6 11	56,821 8 1	1,08,601 8 0

Appendix No. 19—*concluded.*

No.	NAME OF WORK.	Sanctioned Grants.		Expenditure.		Unexpended balances of the grants to be renewed.	
		For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.	For years previous to 1918-19.	For 1918-19.
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
	Brought forward Rs. ...	1,49,612 14 4	2,27,407 0 0	82,849 15 0	1,00,244 6 11	56,821 8 1	1,08,601 8 0
	Public Health—Brought forward Rs. ...	62,109 10 8	52,878 12 1	29,245 9 0	28,458 1 6	32,816 0 0	24,387 6 0
	XI—Public Health—*contd.*						
119	Constructing a new incineration at Parel Laboratory	3,279 0 0	.....	1,025 14 11	.....	2,253 0 0	.....
120	Paving the space round the cattle troughs at Tardeo Flats.	.....	3,036 0 0	.....	1,725 1 2	.....	1,310 0 0
121	Constructing latrines and urinals between Town Hall and Custom House	.....	16,306 0 0	.....	.....	.....	16,306 0 0
122	Construction of a Store-room on the site occupied by the structure known as motor loading Dep t at Null Bazar	.....	90 5 8	.....	85 6 0	.....	.....
	Total ...	65,388 10 8	72,311 1 9	30,271 7 11	30,268 8 8	35,069 0 0	42,003 6 0
	XII—Markets and Slaughter Houses.						
123	Constructing a market on the west side of Musjid Bunder Station	9,270 6 4	.....	4,970 9 9	.....	4,299 0 0	.....
124	Erecting a washing place at Bandra Slaugher Houses ...	957 0 0	.....	831 4 1	.....	.....	.....
125	Constructing a railing to enclose the yard at Bandra Slaughter Houses	.....	4,500 0 0	.....	2,591 12 2	.....	1,908 0 0
126	Constructing a road to the Pig Slaughter House, Arthur Road	.....	4,830 0 0	.....	2,679 6 11	.....	2,150 0 0
127	Constructing masonry stable in Arthur Crawford Markets ...	.....	10,000 0 0	.....	2,113 13 1	.....	7,886 0 0
128	Constructing latrines and urinals in Arthur Crawford Markets.	1,459 12 1	5,000 0 0	60 7 2	.....	1,399 0 0	5,000 0 0
129	Remodelling the Arthur Crawford Markets	12,000 0 0	.....	.....	.....	12,000 0 0	.....
130	Providing temporary structure to shelter animals at Bandra Slaughter Houses	8,368 0 0	6,290 0 0	115 10 2	.....	8,252 0 0	6,290 0 0
131	Constructing a new Pork Market at Dhobitalao	7,272 3 1	.....	23 13 10	.....	7,248 0 0	.....
132	Rebuilding the Sheep pens at Bandra Slaughter Houses ...	.....	83 15 10	.....	83 15 10	.....	.....
	Total ...	39,327 5 6	30,703 15 10	6,001 13 0	7,469 0 0	33,198 0 0	23,234 0 0
	Grand Total Rs. ...	2,54,328 14 6	3,30,422 1 7	1,19,123 3 11	1,37,981 15 7	1,25,088 8 1	1,73,838 14 0
		5,81,751 0 1		2,57,105 3 6		2,98,927 6 1	

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

Appendix

STATEMENT showing the principal liabilities on account of Street Improvements incurred at rates finally made

Name of the Party.	Locality.	Actual area acquired.	AS ORIGINALLY	
			Rate per Square Yard.	Compensation for Land.
		Sq. yds.	Rs. a. p	Rs. a. p.
Messrs. Crawford Bayley & Co. for the Directors of the Juma Musjid.	Junction of Musjid Bunder Road and Samuel Street.	8·19	350 0 0	2,866 8 0
Bai Ratanbai, widow of Mangaldas Pranjivandas and Bai Kashibai Shivdas Doctor	Junction of Borebhat Lane and Cow Lane, Girgaum.	56·37	20 0 0	1,127 6 5
Messrs. Crawford Bayley & Co. for Mr. Kaderbai Shaikhbhai.	Junction of Abdul Rehman and Samshet Streets.	16·05 18 57	300 0 0 120 0 0	4,815 0 0 2,228 6 5
Mr. Jesangbhai Javerchand	Junction of Musjid Bunder Road and Samuel Street.	49·88	350 0 0	17,458 0 0
Mr. Abdullabhoy Fazalbhoy	Abdul Rehman Street	14·32	250 0 0	3,589 0 0
Messrs. Syed Mustafa Syed Ibrahim, Syed Mahomed Syed Ibrahim, through the Deputy Collector on Special Duty, Bombay.	Sonapur Lane	55·50	30 0 0	1,665 0 0
Mr. Framji Cawasji Engineer	Girgaum Road	36 22	40 0 0	1,448 12 10
Messrs. Lalji Dongersi and Jadhowji Dongersi.	DeSouza Street	4·40	40 0 0	176 0 0
Mr. Rustomji Dhunjibhoy Cooper, through the Deputy Collector on Special Duty, Bombay.	Sonapur Street	48·72	30 0 0	1,461 9 7
Mr. Pestonji A. Wadia	Nanabhai Lane	12·39	50 0 0	619 8 0
Mr. Balubhai Kahandas Maniar	Junction of Dady Set Agiary Street and Cathedral Street.	68·79	95 0 0	6,535 0 10
Mr. Essabhai Hasonbhai	Sutar Chawl Street	15·28	120 0 0	1,833 9 7
Sir Jamsetji Jijibhoy & others, through Messrs. Crawford Bayley & Co.	Junction of Abdul Rehman Street and Musjid Bunder Road.	151·00	250 0 0	37,750 0 0
Messrs. (1) Curumally Abdulla, (2) Keshawlal Punjaram, (3) Hajibhoy Allarakhia Thaver and (4) Ahmed Curumally, carrying on business under the name and style of Messrs. Allarakhia Thaver and Co.	Grant Road	53·39	80 0 0	4,271 3 2
Mr. Tayab Haji Ahmed Haji Hassam, minor by his mother and testamentary guardian Bai Aishabai Haji Ahmed Hassam.	Abdul Rehman Street	7·54	250 0 0	1,885 0 0
Messrs. (1) Abdul Kayam Allibhoy, (2) Ebrahim Allibhoy and (3) Ismailji Allibhoy.	Abdul Rehman Street	19·45	280 0 0	5,446 0 0
Mr. Valabhdas Tejpal	Dongri Street	21·90	120 0 0	2,628 0 0
The Trustees of the Christ Church, Byculla.	Clare Road, Plot VIII	209·07	25 0 0	7,476 12 0
Mr. Mulla Mahomedalli Shaik Sarafalli.	Girgaum Road	59·42	60 0 0	3,565 3 2
Deputy Collector on Special Duty for Taki Mahomed Jan Mahomed.	Sonapur Lane	138⅜ or 138 33	30 0 0	4,150 0 0
Mr. Haji Abdul Satar Haji Usman ..	New Parbhadevi Road	133·81	4 0 0	535 3 10
Mr. Jehangir Framji Batliboi	Nepean Sea Road	149·08	17 0 0	2,534 5 9
Bai Laxmibai Parshotam Tribhowandas...	Harkness Road	116·40	12 0 0	1,396 12 10
	Total ...	1,554·07	.....	1,17,453 6 5

	As originally proposed.	As subsequently sanctioned and paid.
	Rs. a. p.	Rs. a. p.
Average rate per square yard for compensation for land	75·58 or 75 9 3	130 09 or 130 1 5
Do. do. do. for structure ...	15·50 or 15 8 0	7·12 or 7 1 11
Do. do. do. for total amount ...	91·08 or 91 1 3	137·21 or 137 3 4 *i.e.*, 50·65 per cent.
Do. do. do. on interest, &c. ...	.....	4·10 or 4 1 7 *i.e.*, 4·50 per cent.
Do. do do. on total amount as finally paid.	.....	141·31 or 141 4 11 *i.e.*, 55·15 per cent.

D. ROBERTSON,
Acting Chief Accountant.

No. 20.

originally sanctioned and at rates subsequently increased and on which payments were during 1918-19.

PROPOSED.		AS SUBSEQUENTLY SANCTIONED AND PAID.				REMARKS.
Compensation for Structure.	Total.	Rate per Square Yard.	Compensation for Land.	Compensation for Structure.	Total.	
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p	Rs. a. p.	Rs. a. p.	
.....	2,866 8 0	500 0 0	4,095 0 0	.....	4,095 0 0	
2,048 0 0	3,175 6 5	.....	4,000 0 0	.....	* 4,000 0 0	* Settled for lump sum.
.....	4,815 0 0	500 0 0	17,310 0 0	.....	17,310 0 0	
.....	2,228 6 5					
.....	17,458 0 0	500 0 0	24,940 0 0	.....	24,940 0 0	
1,040 0 0	4,620 0 0	350 0 0	5,012 0 0	900 0 0	5,912 0 0	
1,457 0 0	3,122 0 0	.....	4,000 0 0	.....	* 4,000 0 0	* Settled for lump sum.
350 0 0	1,738 12 10	60 0 0	2,173 3 2	492 0 0	2,665 3 2	
.....	176 0 0	80 0 0	352 0 0	.....	352 0 0	
871 0 0	2,332 9 7	.....	2,367 0 0	.....	* 2,367 0 0	* Settled for lump sum.
.....	619 3 0	60 0 0	743 6 5	.....	743 6 5	
1,932 0 0	8,467 0 10	105 0 0	7,222 15 2	1,932 0 0	9,154 15 2	
.....	1,833 9 7	200 0 0	3,056 0 0	.....	3,056 0 0	
.....	37,750 0 0	500 0 0	75,500 0 0	† 6,255 2 0	81,755 2 0	† Interest at 6 per cent. per annum from 13 12-16 to 30-4-1918.
5,8.9 0 0	10,170 3 2	120 0 0	6,406 12 10	3,265 0 0	9,671 12 10	
92 0 0	1,977 0 0	575 6 0	2,827 8 0	.....	2,827 8 0	
452 0 0	5,898 0 0	350 0 0	6,807 8 0	400 0 0	7,207 8 0	
394 0 0	3,022 0 0	125 0 0	2,737 8 0	300 0 0	3,037 8 0	
1,115 0 0	8,591 12 0	35 0 0	10,467 7 2	224 0 0 † 120 0 0 ‡ 1,497 0 0	12,308 7 2	Costs and Court fees.
.....	3,565 3 2	70 0 0	4,159 6 5	.....	4,159 6 5	‡ Cost of rebuilding the wall along the set-back line, paid to the Executive Engineer, Presidency.
6,377 0 0	10,527 0 0	.....	12,080 0 0	.....	12,080 0 0	
.....	535 3 10	5 0 0	669 0 10	.....	669 0 10	
795 0 0	3,329 5 9	25 0 0	3,727 0 0	795 0 0	4,522 0 0	
1,264 0 0	2,660 12 10	14 0 0	1,513 3 2	1,264 0 0	2,777 3 2	
24,086 0 0	1,41,539 6 5	.....	2,02,166 15 2	(a) 17,444 2 0	2,19,611 1 2	(a) Includes Rs. 6,375-2-0 for interest, Court costs, &c.

P. W. MONIE,
Municipal Commissioner.

Appendix

Income of the Bombay Municipality from the year 1865

Year.	Gross Valuation.	House Rate.	Police Rate.	Lighting Rate.	Wheel Tax and Tolls.	Licenses for trades, Land Conveyances, Music, etc.	Town Duties.	Liquor Licenses.	Tobacco Licenses.		Contribution from Insurance Companies or Fire Tax.
		TAXATION PROPER.									
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
1865	1,20,14,655	10,57,879	....	...	2,32,698	2,023	5,04,789	1,45,873	.. ..	.. .	....
1866	1,48,94,893	7,16,004	2,93,683	98 417	3,13,330	2,72,655	5,132	46,924	1,20,390	....	....
1867	1,63,09,535	9,84,068	4,11,040	1,82,849	2,38,178	2,05,536	.....	1,04 838	1,18,426	....	....
1868	1.47,49.075	9,20,587	3,75,607	2,46,071	2 68,514	2,08 820	....	1 20,566	1,36,762	....	....
1869	1,39,41,260	7,99,306	2,59,583	2,48,406	2 57,574	1,50,391	3,03,298	2,49,077	1,51,178	....	....
1870	1,36,20,885	7,22,783	2,37,643	2,46,934	2,50,581	28,147	5,94,989	1,23,692	1,39,830	....	....
1871	1,34,26.845	6,75,189	2,30,409	2.30,256	2,05,521	7,655	4,51,496	1,15,170	1,28,0 6	....	....
1872	1,29,33,510	7,09,953	2,41,774	2,41,348	2,04,097	5,862	4,67,638	59,914	1,47,654	....	....
1873	1,26,71,816	7,01,013	2,37,282	2,37,050	2,16,083	87	4,46,924	2,79,074	1,48,792	....	....
1874	1,19,65,190	5,94,814	2,29.102	2.27,525	2,48,217	3,908	4,85,649	1,24,507	1,47,779	....	16,519
1875	1,15,55,066	5,52,738	2,20,569	2,16,632	2,45,274	591	6,72,987	1,58,980	1,45,956	....	14,855
1876	1,12,75,719	5,73.458	2,17,684	2,13,094	2,38,487	2,113	6,36,147	1,41,725	1,48,356	....	13,922
1877	1,14,77,690	5,47,511	2,20,061	2,14,670	2,44,369	1,948	7,51,019	85,697	1,49,562	....	19,164
		Consolidated Rate.									
1878	1,15,37,118	....	9,35,034	....	2,14,560	....	6,95,006	1,60,565	1,52,229	....	22,573
1879	1,14,93,417	....	10,52,773	....	2,25,569	3,563	5,93,617	1,43,750	1,65,029	....	20,761
1880	1,17,80,525	....	8,99,634	....	2,31,925	846	6,57 784	1,43,750	1,61,127	....	23,911
1881	1,17,14,470	@8°/o	10,58,810	....	2,31,866	1,502	6,37,482	1,43,750	1,61,625	....	24,0 59
					For 15 months, i.e., from 1st January 1882 to 31st March 1883, the calendar year						
1882-83	1,25,80,263	....	12,34,975	....	4,12,027	....	8,17,199	1,43,750	2,06,014	....	32,000
1883-81 .. .	1,45,64,507	@8°/o	9,83,533	....	2,55,227	3,417	6,67,113	1,79,687	1,74,306	....	24,708
1884-85	1,53,82,744	Do.	11,80,307	...	3,09,552	4,305	7,73,431	1,43,750	1,72,622	....	25,517
1885-86	2,00,25,223	Do.	14,61,305	....	3,32,485	4,525	6,79,293	1 43,750	1,79,177	....	29,914
1886-87 .. .	2 16,27,230	@8½°/o	14,88,867	....	3,19,561	3,913	10,12,153	1,43,750	1,90,250	....	29,776
1887-88	2,27,92 346	@8°/o	14,07,013	....	3,36,993	4,050	9,96,750	1,43,750	1,84,168	(a) Fire tax	37,857
1888-89	2,39,51 043	Do	14,66,024	....	3,14,571	45,471	7,25,897	1,43,750	1,91,297	@½°/o	34,708
1889-90	2,73,64 359	Do.	15,82,509	....	3,25,616	52,792	6,67,065	1,43,750	1,90,922	....	(a) 79,137
1890-91	2,82,27,355	Do.	15,64,932	....	3,56,648	60,451	9,79,520	1,43,750	1,80,284	@¼°/o	1,25,345
1:91-92	2,85,80,023	Do.	17,55,081	....	3,42,973	75,101	8,40,222	1,43,750	1 86,151	Do.	1,64,263
1892-93	2,64 03,982	Do.	17.73,401	....	3,44,905	79,376	9,73,928	1,43,750	1,86.703	Do.	1,65,838
1893-94	2,69,79,728	Do.	17,49,321	....	3,51,175	85,817	8,97,256	1,43,750	1,86,829	@½°/o	1,10,504
1894-95	2,76,13,741	Do.	17,49.385	....	3,56,782	95,137	8,88,542	1,43,750	2,05,348	Do.	1,09,325
1895 96	2,82 56,891	Do.	17,67,000	...	3,65,525	96,335	9,10,851	1,43,750	2,17,475	Do.	1,10,437
1896-97	2,89.27.618	Do.	17.45 829	...	2,46,681	74,085	6,45,144	1,43,750	1,82,867	Do.	1,09,138
1897-98	2,94,82,305	Do.	19,35,325	...	3.46.838	88,668	9,51,424	1,43,750	1,89,323	Do.	1,20,961
1898-99	2,98,53,636	@9°/o	21,06,935	....	3,39,197	87,754	11,17,161	1,43,750	2,08,541	Do.	1,17,219
1899-1900 ..	3,05.17,091	@12°/o	28,74,389	....	3,02,748	90,346	15.94,721	1,43,750	2,21,338	Do.	1,20,127
1900-1901 ..	3,13,75,106	Do.	28,94,971	....	3,21,366	95,702	11,31,371	1,43,750	2,16,039	Do.	1,20,647
1901-02	3,18,11,6.5	@10°/o	25,72,001	....	3,40,747	92,733	8,62,123	1,43,750	2,33,005	Do.	1,27,570
1902-03	3,18,91,409	Do.	25,81,510	....	3,71,013	1,02 070	12,19.344	1,43,750	2,44 092	Do.	1,29,049
1903-04	3,44,49,599	Do.	27,64.974	....	3,28,070	1,05,511	11,78,973	1,43,750	2,40 064	Do.	1,38,163
1904-05	3,54,15.931	Do.	30,26,572	.....	4,19,587	1,03,772	14,16,943	1,43,750	2,60,744	Do.	1,51,302
1905-06	3,81,90,177	@8⅝°/o	27,55.778	....	4,48,343	98,923	11,68,450	1,43,750	2,72,779	@⅝°/o	1,20,057
1906-07	4,14,43,901	Do.	29,58 315	....	4,42,749	1,03,221	13,34,074	1,43,750	2,65,828	Do.	1,28,631
1907-08	4,42 79,940	@8²/o	29,74,517	....	4,29,892	1,06 284	13 90,203	1,43,750	2,80,355	Do.	1,39,329
1908-09	4,68 75,766	Do.	31,47,349	....	4,79,857	1,19,278	12,96 320	1,43,750	2,78,890	Do.	1,47,522
1909-10	4,94.44,987	Do.	38.05,816	....	5,01,553	97,754	14,23,491	1,43,750	2,60,614	Do.	1,63 267
1910-11	5 20,51,478	@9½°/o	43,61,660	....	4,72,198	99,314	16,86 660	1,43.750	2,59.907	@½%	2,15,904
1911-12	5,36,02,464	@10¼°/o	47,42,693	....	4 69,487	1,13,777	12,47,097	1,43,750	2,78,896	Do.	2,33,627
1912-13	5,51,71,773	Do.	47,18,833	....	5,23,522	1 21,773	17,42.131	1,43.750	2 83,526	Do.	2.33 029
1913-14	5,79,47.463	Do.	46,41,022	. ..	5,61,500	1,29,771	17,30,637	1,43.750	2,91,288	Do.	2.44.283
1914-15	5.98,41.390	@9⅛%	48,49,431	....	5,19,818	1,27.640	9,32,810	1,43,750	2,92.036	@⅝°/o	1 92,018
1915-16	6,34,16,191	Do.	52,31,257	....	5,18,773	1,27,587	20,19,097	1.43,750	3,04,644	Do.	2,06.494
1916-17	6.54,13,855	Do.	52,16,432	....	5,61.416	1,31,072	18,70,335	1,43,755	3,52.877	Do.	2,05,911
1917-18	6,89,28 001	Do.	54,75,264	....	5,86 976	1,58 940	20.40,205	1.43 750	3,71,291	Do.	2,16,130
1918-19	8 29,75.130	Do.	72,19,649	....	6,04,640	1.53,340	19,51,583	1,43,750	3,86 009	Do.	2.84 962

D. ROBERTSON,
Acting Chief Accountant.

No. 21.

to close of the financial year 1918-1919.

Total Taxation Proper.	SERVICES RENDERED. Halalkhore Tax.	SERVICES RENDERED. Water Tax.	Total services rendered.	MISCELLANEOUS. Government contribution for Police and City Improvement Trust.	MISCELLANEOUS. Returns from Property and Miscellaneous.	Total Income.	Year.	Population by Census.	Incidence of taxation per head of population.	Five years' average annual income.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.			Rs. a. p.	
19,42,762	....	1,78,719	1,78,719	....	2,42,306	23,63,787	1865	8,16,562	2 9 6	
18,36,545	1,92,852	6,49,121	8,41,973	....	2,06,154	29,14,672	1866	....	3 5 1	
22,44,905	1,45,824	3,73,006	5,18,830	1,50,000	1,26,789	30,40,524	1867	....	3 6 1	31,12,976
22,76,927	3,91,454	4,98,377	8,89,831	2,60,129	4,25,787	38,52,674	1868	....	3 14 0	
24,18,773	2,30,562	3,62,998	5,93,560	1,09,882	2,71,011	33,93,226	1869	....	3 11 0	
23,44,659	2,13,197	3,66,986	5,80,183	1,09,882	2,73,025	33,07,749	1870	....	3 9 3	
20,44,042	1,99,986	3,57,578	5,57,564	....	2,69,554	28,71,160	1871	....	3 2 11	
20,78,240	2,17,071	4,07,835	6,24,906	....	3,45,185	35,48,331	1872	6,44,405	4 3 1	31,06,534
20,66,275	2,00,590	4,00,639	6,01,229	....	4,56,604	33,24,108	1873	....	4 7 2	
20,78,020	1,92,235	3,63,087	5,55,322	....	3,47,980	29,81,322	1874	....	4 1 4	
22,28,085	1,94,215	3,00,212	4,94,427	90,000	3,31,014	31,43,526	1875	....	4 3 7	
21,84,986	2,04,077	3,08,377	5,12,454	90,000	3,90,283	31,77,723	1876	....	4 2 11	
22,34,031	2,01,299	3,11,823	5,13,122	90,000	4,04,299	32,41,452	1877	....	4 4 2	32,09,805
21,79,968	1,95,380	2,92,780	4,88,160	90,000	3,87,025	31,45,153	1878	....	4 2 2	
21,45,062	2,42,015	3,54,798	5,96,813	90,000	5,09,299	33,41,174	1879	....	4 4 0	
21,18,977	2,03,047	3,90,703	5,93,750	75,000	4,64,173	32,51,870	1880	....	4 3 4	
22,59,094	2,81,805	5,24,819	8,06,624	50,000	7,57,976	38,73,694	1881	7,73,196	3 15 5	
being changed to the financial year, the income was as follows:—										
28,45,965	3,28,916	6,70,677	9,99,593	91,125	6,75,575	46,12,240	1882-83	....	4 15 6	39,37,843
22,87,996	2,43,557	5,47,647	7,91,204	85,672	5,72,400	37,37,272	1883-84	....	3 15 8	
25,83,967	2,89,616	5,96,123	8,85,739	90,000	6,54,162	42,13,868	1884-85	....	4 7 9	
28,30,449	3,16,787	6,65,370	9,82,157	90,000	5,71,367	44,73,973	1885-86	....	4 14 10	
31,88,299	3,18,630	7,74,651	10,93,281	....	6,20,214	49,01,814	1886-87	....	5 8 7	
31,10,581	3,72,258	8,83,724	12,55,982	....	7,99,967	51,66,530	1887-88	....	5 10 4	49,70,136
29,21,718	3,90,039	9,63,804	13,53,843	....	6,90,632	49,66,193	1888-89	....	5 8 5	
30,41,841	4,73,919	11,23,006	15,96,925	....	7,03,403	53,42,169	1889-90	....	5 15 11	
34,10,933	5,27,222	11,49,198	16,76,420	....	(a) 10,78,551	61,65,901	1890-91	....	6 9 3	
35,07,542	5,55,877	11,81,429	17,37,306	....	9,88,335	62,33,183	1891-92	8,21,764	6 6 1	
36,68,001	6,22,200	14,07,081	20,29,281	....	9,75,661	66,72,943	1892-93	....	6 14 11	64,74,819
35,24,652	5,82,026	13,86,828	18,68,854	....	(b) 13,69,189	67,62,695	1893-94	....	6 9 0	
35,47,569	6,81,557	13,88,265	20,69,822	....	9,21,981	65,3 ,372	1894-95	....	6 13 4	
36,11,373	6,57,812	14,43,895	21,00,707	.. .	(c) 10,49,030	67,61,710	1895-96	....	6 15 2	
31,47,494	6,88,486	13,88,410	20,86,896	....	9,74,588	62,08,978	1896-97	....	6 5 10	
37,76,284	7,35,485	13,29,852	20,65,337	....	(d) 13,03,839	71,45,560	1897-98	....	7 1 8	72,21,595
41,20,620	7,13,122	15,00,970	22,14,092	....	8,27,199	71,61,911	1898-99	....	7 11 4	
53,47,419	7,25,264	17,72,967	24,98,231	....	9,84,167	88,29,817	1899-1900	....	9 8 9	
49,24,736	7,14,440	17,35,635	24,50,075	....	10,28,037	84,02,848	1900-01	....	8 15 7	
43,71,989	7,88,439	15,47,120	23,35,559	....	10,59,181	77,66,729	1901-02	7,76,006	8 10 3	
47,90,830	7,95,984	15,13,976	23,09,960	....	10,74,898	81,75,688	1902-03	....	9 2 4	64,32,800
49,59,505	8,10,610	15,71,566	23,82,176	....	11,40,944	84,82,625	1903-04	....	9 7 4	
55,22,670	8,75,194	17,14,453	25,89,647	....	12,23,794	93,36,111	1904-05	....	10 7 3	
50,06,080	9,32,455	18,57,780	27,90,435	....	12,96,024	90,92,539	1905-06	....	10 0 9	
53,76,598	9,91,362	19,38,429	29,29,791	....	13,42,112	96,48,501	1906-07	9,77,822	8 7 10	1,00,26,055
54,64,330	10,46,874	19,48,830	29,95,704	....	14,29,290	98,89,324	1907-08	....	8 10 5	
56,12,966	11,19,322	20,04,189	31,23,511	....	15,44,671	1,02,86,048	1908-09	....	8 14 11	
64,16,245	11,92,344	20,11,788	32,04,134	....	15,93,485	1,12,13,864	1909-10	....	9 13 5	
72,38,583	12,32,951	19,95,327	32,28,278	....	17,29,288	1,21,96,149	1910-11	9,79,445	10 11 0	
72,29,327	12,92,697	20,79,120	33,71,817	....	20,54,645	1,26,55,789	1911-12	....	10 13 2	
77,66,564	13,50,833	21,70,948	35,21,781		(e) 14,53,244	1,27,41,589	1912-13	....	11 8 5	1,25,76,679
77,42,248	13,85,128	22,85,434	36,70,562	....	14,63,693	1,28,76,501	1913-14	....	11 10 5	
70,57,003	14,17,648	22,16,012	36,33,660		17,22,703	1,24,13,366	1914-15	....	10 14 8	
85,51,602	14,68,587	23,23,021	37,91,608		14,87,860	1,38,31,070	1915-16	....	12 9 8	
84,51,793	15,25,637	24,71,834	39,97,471	....	16,69,475	1,40,48,739	1916-17	....	12 11 11	1,50,20,845
89,92,656	16,13,123	26,97,720	43,10,843	....	15,75,888	1,48,29,386	1917-18	....	13 9 4	
1,01,46,333	18,34,068	29,77,602	48,11,670	....	18, 6 81	1,73,74,184	1918-19	....	15 14 2	

(a) Includes Rs. 2,32,544 for arrear recoveries for work done.

(b) Rs. 4,58,699 adjusted on account of premia on loans.

(c) Includes premia of Rs. 97,749 on loan raised.

(d) Includes rebate of Plague expenses amounting to Rs 4,37,055.

(e) Exclusive of the amount of interest realized on Sinking and Special Funds which was hitherto treated as Income.

P. W. MONIE,
Municipal Commissioner.

Appendix

Expenditure of the Bombay Municipality from the

Year.	General Superintendence.	Assessment and Collection.	Fire Brigade.	Public Works (Engineering) Department.	Public Health Department.	General Stores.	Pensions and Gratuities.	Police Charges.	Education.	Medical Relief.	Debt.
	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1865	94,354	1,26,472	Not	31,52,722	8,15,914	Not	345	1,41,931	....	....	....
1866	1,31,622	58,638	traceable.	13,32,917	14,40,293	traceable.	14,430	3,96,169	....	....	20,554
1867	61,337	71,531		17,38,626	14,26,321		2,580	4,25,423	....	....	73,360
1868	70,690	87,602	22,708	12,29,594	10,45,862	9,012	3,733	4,17,083	....	....	2,19,977
1869	1,09,879	1,25,691	23,318	12,81,429	8,57,425	8,312	5,634	3,25,637	....	....	3,81,368
1870	1,32,202	1,12,498	30,896	13,73,897	8,29,784	8,046	10,354	4,24,905	....	....	4,46,187
1871	1,22,253	1,12,851	31,261	16,11,527	7,84,485	6,482	7,758	5,90,579	7,948	....	4,75,704
1872	1,15,930	1,38,354	34,435	12,83,987	7,61,854	*	7,221	3,27,209	9,321	....	2,52,971
1873	1,16,575	1,41,308	20,546	10,70,919	7,96,860	*	6,996	3,40,892	10,000	....	5,06,270
1874	1,11,360	1,29,023	25,316	10,53,829	7,38,139	*	8,030	3,44,325	10,000	....	5,09,023
1875	1,13,902	1,36,708	20,063	9,90,091	7,42,958	*	8,631	3,52,920	10,000	36,000	7,15,561
1876	1,09,189	1,42,267	37,754	9,70,195	7,07,681	....	11,157	3,57,734	10,000	36,000	7,09,127
1877	1,10,164	1,43,672	24,193	8,93,548	7,49,560	....	8,301	3,54,535	10,000	36,000	6,27,792
1878	1,15,597	1,44,467	27,517	8,13,057	7,90,481	....	8,008	3,61,581	15,000	36,000	8,66,223
1879	1,21,997	1,34,372	23,980	8,35,687	8,04,295	....	12,084	3,64,304	17,000	36,000	6,91,903
1880	1,28,493	1,37,726	24,800	8,86,191	7,52,410	....	7,749	3,59,166	17,500	36,000	6,42,860
1881	1,28,951	1,52,107	29,242	9,16,699	7,98,021	....	8,658	3,57,752	17,500	20,435	7,47,209
							For 15 months from 1st January 1882 to 31st March 1883, the calendar				
1882-83	1,82,715	1,87,858	73,665	14,91,108	10,14,785	....	12,803	4,54,034	28,125	34,948	12,28,882
1883-84	2,01,021	1,48,317	55,389	10,55,338	9,16,316	....	40,333	3,62,508	22,500	27,832	8,12,061
1884-85	1,65,258	1,64,917	64,977	11,51,551	9,19,967	....	23,293	3,61,748	22,500	34,512	7,37,608
1885-86	1,66,827	1,84,717	43,854	12,34,529	9,55,607	....	18,318	3,59,223	23,700	31,349	7,87,527
1886-87	1,73,090	2,17,134	70,904	13,03,859	10,10,118	....	19,133	3,61,914	32,604	48,386	8,93,553
1887-88	1,70,945	2,12,138	69,670	13,64,393	10,75,735	....	30,531	2,61,348	1,34,715	40,753	23,27,682
1888-89	1,69,223	1,98,820	1,12,328	14,91,041	11,56,410	....	19,470	2,69,140	50,982	36,857	14,99,115
1889-90	1,77,133	1,92,643	93,907	13,62,241	11,96,577	....	29,139	2,58,285	60,358	35,746	14,85,711
1890-91	1,82,198	2,23,854	1,29,291	15,92,034	13,02,064	....	32,117	2,58,285	68,646	38,601	15,52,139
1891-92	1,91,028	2,41,902	88,671	15,92,073	12,92,529	....	33,890	2,58,285	80,722	50,284	16,37,405
1892-93 ..	1,90,920	2,52,123	1,47,694	17,72,512	13,01,563	....	29,845	3,63,625	87,565	49,576	21,97,233
1893-94 .. .	2,23,517	2,42,413	1,06,315	15,41,703	13,39,614	....	37,510	3,30,272	88,015	52,476	21,27,457
1894-95	2,11 621	2,47,771	1,14,141	16,67,335	13,70.168	....	46,368	3,74,022	87,290	61,456	20,26,571
1895-96 .. .	1,99,317	2,40,990	1,15,961	17,31,317	13,75,234	....	48,452	5,01,096	88,481	56,260	21,19,651
1896-97	1,99,641	2,45,159	1,07,654	15,55,649	14,09,867	....	58,601	5,51,589	88,889	53,101	20,56,122
1897-98	2,14 792	2,50,483	1,18,508	16,10,357	15,86,633	....	70,096	5,90,000	1,02,624	54,233	22,60,571
1898-99	2,10 380	2,57 182	1,09,076	14,19,617	16,89,174	....	56,866	5 01,013	1,14,776	55,221	24,81,138
1899-1900	1 97,643	2,72,850	1,17,098	16,01,898	20,30,444	....	66,034	5,09,000	1,11,930	54,997	23,40,269
1900-01	2,28 044	3,26,719	1,18,639	17,01,178	21,68,479	....	75,929	6,02,455	1,11,930	58,977	25,03,311
1901 02	2,13,036	2,84,064	1,21,728	15,71 437	20,07,064	....	56,440	5,00,012	1,12,513	57,000	26,56,575
1902-03	2,16,767	2,92,939	1,10,182	15,90,956	20,05,939	....	68,852	5,97,504	1,10,474	56,290	27,11,361
1903-04	2,34,069	2,99,459	1,24,119	16,65,761	19,79,374	....	57,487	5,00,381	1,12,858	54,625	29,18,564
1904-05	2,29,315	3,18,017	1,34,282	18,81,039	18,46,402	15,904	74,334	5,01,076	1,59,763	57,000	28,33,563
1905-06	2,43,603	3,24,580	1,23,986	19,34,844	19,91,160	19,769	71,778	5,00,000	1,61,420	57,606	29,82,971
1906-07	3,06,306	3,29,381	1,28,015	19,39,665	21,46,791	27,369	75,303	5,01,862	1,65,815	56,218	31,77,715
1907-08	2,59,564	3,66,403	1,69,574	21,17,200	22 87,706	31,328	74,395	1,38,450	2,65,350	4,50,151	32,26,943
1908-09	2,71,046	3,73,684	1,71,926	23,92,891	24,34,002	29,456	65,623	....	2,76,685	4,64 535	32,98,247
1909 10	3,09 102	3,69,460	1,66,963	23,36,781	23,64,080	30,859	69,817	....	2.93,256	4.62,579	33.77,184
1910-11	2,89,088	3,85,546	1,88,087	24,16,832	21.03,537	31 063	84,294	....	4,17,124	4,64,416	36,07,569
1911-12 .. .	2,93,600	3,75,204	1,79,978	24,87,700	21,40,626	33,054	86,701	....	4,20,311	4,72,858	37,14,629
1912-13	3,14,525	4,40,506	3,27,304	25,52,034	23,15,511	34,069	96,913	....	4,18,511	4,46,160	33,43,387
1913-14	3,11,659	4,41,694	1,66,104	29,41,742	23,09,128	35 094	1,07,409	....	4,85,285	4,41,640	34,34,230
1914-15	3,13 576	4,16,898	1 85,577	30,02,430	23,15,264	36,771	1,11,204	....	5,03,224	4,39,760	37,62,252
1915-16	3,19 680	4,51,638	1,92,455	30,13,184	23,93,111	38,277	1,15,167	....	5,43,346	4,37,810	39,34,821
1916-17	3,29,014	4,93,398	1,92,598	31,61,770	25,33,855	40,538	1,46,580	....	5,91,873	4,35,960	44,11,104
1917 18	3,50,132	5,33,526	2,22,212	32,75,695	25,52,833	44,085	1,75,960	....	7,31,595	4,36 570	41,86,764
1918-19	3,38,728	5,29,127	2,57,944	39,46,954	31,2 671	46,820	1,64 955	....	9,27,207	4,89,528	44,30,260

Combined with Controller's Office

D. ROBERTSON,
Acting Chief Accountant.

No. 22.

year 1865 to the year 1918-1919

Contribution to the Bombay Improvement Trust.	Public Gardens.	Stores, Plant and Live Stock.	Municipal Bunding Fund.	Road Improvement Fund.	Investments Fund.	Plague Expenses.	Miscellaneous.	Total.	Year.	Five years' average annual expenditure.
Rs.	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.
....	....	5,10,250	....	....	....	....	1,17,345	49,59,333	1865	
....	....	82,059	....	....	....	....	1,25,240	36,01,922	1866	
....	....	2,70,545	....	....	....	....	1,49,623	42,16,346	1867	>38,77,203
....	....	3,32,722	....	....	....	....	37,775	34,77,058	1868	
....	....	....	....	....	....	....	42,661	31,31,353	1869	
....	....	....	....	....	....	....	23,416	33,92,185	1870	
....	.. .	....	....	....	....	....	53,213	38,04,661	1871	
....	27,213	....	....	....	....	....	(a) 1,57,333	31,15,888	1872	>32,69,595
....	11,857	....	....	....	....	....	22,354	30,44,577	1873	
....	14,473	....	....	....	....	....	46,645	29,90,663	1874	
....	18,282	....	....	....	....	.. .	(b) 1,19,851	32,65,027	1875	
....	21,738	....	....	....	....	....	47,696	31,60,438	1876	
....	20,221	....	....	....	....	....	55,559	30,36,535	1877	>31,68,669
....	21,190	....	....	....	....	....	71,103	32,70,224	1878	
....	17,709	....	....	....	....	....	51,791	31,11,122	1879	
....	20,756	....	....	....	....	....	44,321	30,57,992	1880	
....	19,463	....	2,50,000	....	....	....	(c) 3,52,835	37,98,872	1881	
year being changed to the financial year, the expenditure was:—										
....	26,969	....	50,000	19,000	....	....	38,740	47,53,632	1882-83	>38,41,465
....	21,263	....	20,000	....	....	....	33,934	37,15,812	1883-84	
....	22,738	....	801	....	....	....	(d) 2,11,150	38,81,020	1884-85	
....	23,864	....	39,199	....	....	....	94,226	40,66,940	1885-86	
....	38,326	....	49,779	....	....	.. .	57,562	41,76,362	1886-87	
....	42,123	....	50,221	....	....	.. .	32,436	58,12,690	1887-88	>48,59,951
....	48,934	....	55,577	....	....	....	(e) 1,12,356	52,01,258	1888-89	
....	65,153	....	24,419	....	3,000	....	58,553	50,92,405	1889-90	
....	87,405	....	28,907	....	3,113	....	(f) 1,85,907	56,84,861	1890-91	
....	77,225	....	27,905	....	3,274	....	2,97,780	57,92,773	1891-92	
....	96,964	....	....	....	3,386	....	52,566	45,45,512	1892-93	>62,69,972
....	(f)2,80,453	....	....	....	5,64,972	....	23,321	69,63,928	1893-94	
....	93,969	....	....	....	44,086	....	28,485	63,72,496	1894-95	
....	64,023	....	....	....	1,46,180	....	15,519	67,02,516	1895-96	
....	60,312	....	....	....	1,42,601	4,37,055	35,503	70,04,743	1896-97	
....	71,447	....	....	....	36,478	5,00,000	1,20,712	74,96,969	1897-98	>71,87,147
....	74,959	....	....	....	37,425	—5,00,000 (i)	{ 8,12,546 / 19,673 }	73,35,026	1898-99	
....	75,230	....	....	....	35,316	— 43,694	32,385	73,92,480	1899-1900	
4,74,805	69,870	....	....	....	58,400	— 922	1,86,444	85,80,058	1900-01	
4,81,000	57,685	....	....	....	59,259	....	38,695	82,26,458	1901-02	
3,00,000	58,874	....	....	....	58,136	....	75,124	84,53,398	1902-03	>84,57,384
3,50,000	67,427	....	....	....	33,265	....	34,706	84,31,390	1903-04	
2,50,000	66,092	....	....	....	35,399	1,81,920	57,512	85,91,618	1904-05	
2,50,000	64,751	....	....	....	39,377	2,26,638	(k) 3,62,359	93,74,242	1905-06	
3,00,000	64,735	....	....	....	39,626	2,43,014	18,945	95,20,790	1906-07	
2,66,081	75,158	....	....	....	44,445	1,95,517	1,30,930	1,01,89,201	1907-08	>1,02,22,281
4,50,000	82,905	....	....	....	47,843	2,23,328	37,962	1,06,30,126	1908-09	
7,80,000	98,964	....	....	....	1,21,917	2,00,915	(l) 3,64,173	1,13,97,050	1909-10	
2,35,000	91,210	....	....	....	49,473	1,87,234	1,31,399	1,12,81,872	1910-11	
8,65,000	76,091	....	....	....	57,633	1,55,903	1,25,274 (j)	1,14,84,562	1911-12	
9,23,000	83,982	....	....	....	10,000	1,47,763	2,25,882 (k)	1,16,81,587	1912-13	1,17,90,028
9,32,093	91,683	....	....	....	10,000	1,24,682	2,16,193 (l)	1,20,48,926	1913-14	
9,76,938	92,295	....	....	....	10,000	1,27,633	1,59,869 (m)	1,24,53,191	1914-15	
10,17,420	89,738	....	....	....	10,000	1,22,912	(n) 1,24,031	1,28,03,870	1915-16	
11,01,289	90,491	....	....	....	(p) 3,03,135	1,29,958	(o) 2,37,730	1,42,14,292	1916-17	
10,98,113	81,555	....	....	....	(q) 51 393	1,32,161	3,49,492	1,42,61,391	1917-18	1,45,96,646
11,52,687	93,055	....	....	....	(q) 17 321	1,26,506	13,38,066	1,70,26,648	1918-19	

(a) Includes write-off of loss of in stores of Rs. 1,45,993.
(b) Includes Rs. 50,000 for visit of H. R. H. the Prince of Wales.
(c) Includes special adjustment of Rs. 3,24,827 for re-arranging the different loan funds
(d) Includes loss of Rs. 1,84,774 on the sale of the Panwel Brick Factory.
(e) Includes Rs. 62,048 for loss on sale of investments.
(f) Includes Rs. 1,94,565 for land acquired.
(g) Write-off on account of frontage lands in Agripada.
(h) Includes contribution of Rs. 3,00,000 towards celebrating the visit of T. R. H. the Prince and Princess of Wales.
(i) Includes charges for Grain Compensation and Local Allowance and the loss sustained in the sale of unserviceable stores written off.
(j) Excludes Rs. 5,00,000 transferred from revenue for writing off a portion of the Plague expenditure advanced from Loan Funds.
(k) Excludes Rs. 3,10,053 transferred from revenue for writing off a portion of the Plague expenditure advanced from Loan Funds as well as the amount of investments of interest realized on Sinking and Special Funds.
(l) Excludes Rs. 1,00,000 transferred from revenue for writing off the balance of the Plague expenditure advanced from Loan Funds as well as the amount of investment of interest realized on Sinking and Special Funds.
(m) Excludes Rs. 35,455 being the write-off of the proportionate cost (paid out of Loan Funds) of the Halalkhores' Chawl at Vincent Road sold to the City Improvement Trust as well as the amount of investments of interest realized on Sinking and Special Funds.
(n) Includes Rs. 25,000 being the contribution towards the cost of cadastral survey of the town and island of Bombay.
(o) This includes Rs. 1,20,312 on account of discount on the conversion of 3 per cent. or 3½ per cent. Government Paper into 4 per cent. conversion loan of 1916-17.
(p) This includes Rs. 2,98,135 being the amount of investment on account of sale-proceeds of Municipal lands into Municipal Land and Building Fund.
(q) This includes Rs. 41,393 being the amount of investment on account of sale proceeds of Municipal Lands into Municipal Land and Building Fund.

P. W. MONIE,
Municipal Commissioner.

Appendix No. 23.

CONTRASTED STATEMENT OF INCOME AND EXPENDITURE OF THE BOMBAY MUNICIPALITY FROM 1865 TO 1918-19.

YEAR.	Income.	Expenditure.	DIFFERENCE.	
			Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
1865	23,63,787	49,59,333	.....	25,95,546
1866	29,14,672	36,01,922	.....	6,87,250
1867	30,40,524	42,16,346	.....	11,75,822
1868	38,52,674	34,77,058	3,75,616	.....
1869	33,93,226	31,31,358	2,61,868	.....
1870	33,07,749	33,92,185	.....	84,436
1871	28,71,160	38,04,661	.....	9,33 501
1872	30,48,331	31,15,888	.....	67,557
1873	33 24,108	30,44,577	2,79,531	.....
1874	29,81,222	29,90,663	.....	9 341
1875	31,43,526	32,65,027	.....	1,21,501
1876	31,77,723	31,60,438	17,285	.....
1877	32,41,452	30,36,535	2,04,917	.....
1878	31,45,153	32,70,224	.....	1,25,071
1879	33,41,174	31,11,122	2,30,052	.....
1880	32,51,870	30,57,992	1,93,878	.....
1881	38,73,694	37,98,872	74,822	.....
From 1st January 1882 to 31st March 1883 (15 months).	46,12,240	47,53,632	.....	1,41,392
1883-1884	37,37,272	37,15,812	21,460	.....
1884-1885	42,13,868	38,81,020	3,32,848	.....
1885-1886	44,73,973	40,66,940	4,07,033	.....
1886-1887	49,01,814	41,76,362	7,25,452	.....
1887-1888	51,66,530	58,12,690	.....	6,46,160
1888-1889	49 66,193	52,01,258	.....	2,35,065
1889-1890	53,42,169	50,42,405	2,99,764	.....
1890-1891	61.65,901	56,84,861	4,81,040	.....
1891-1892	62,33,183	57,82,073	4,51,110	.....
1892-1893	66,72,943	65,45,512	1,27,431	.....
1893-1894	67,62 695	69,63,928	.....	2,01,233
1894-1895	65,39.372	63,73,486	1,65,886	.....
1895-1896	67.61,710	67,02,516	59,194	.....
1896-1897	62,08.978	70,04,743	.....	7,95,765
1897-1898	71,45,560	74,96,969	.....	3,51.409
1898-1899	71.61 911	73,39,026	.....	1,77,115
1899-1900	88,29,817	73,92,480	14,37,337	.....
1900-1901	84,02.848	85,84,058	.....	1,81,210
1901-1902	77,66,729	82,26,458	.....	4 59,729
1902-1903	81,75,688	84,53,398	.....	2,77,710
1903-1904	84.82,625	84,31,390	51,235	.....
1904-1905	93 36 111	85,91,618	7,14,493	.....
1905-1906	90,92,539	93,74,242	.....	2.81,703
1906-1907	96,48.501	95,20,790	1,27,711	.....
1907-1908	98,89.324	1,01,89,201	.....	2,99,877
1908-1909	1,02,86.048	1,06,30,126	.....	3,44 078
1909-1910	1.12,13.864	1,13,97,050	.....	1,83,186
1910-1911	1.21,96,149	1,12,81,872	9,14,277	.....
1911-1912	1.26 55,789	* 1,14,84,562	11,71.227	.....
1912-1913	1,27,41,589	(a) 1,16,81,587	10,60,002	.....
1913-1914	1,28,76,501	(b) 1,20,48,926	8,27,575	.....
1914-1915	1,24.13,366	(c) 1,24,53,191	.....	39,825
1915-1916	1,38,31,070	1,28,03,870	10,27,200	.....
1916-1917	1,40,48,739	1,42,14,292	.....	1,65,553
1917-1918	1,48,29,386	1,42,61,391	5,67,995	.....
1918-1919	1,73,74,184	1,70,26,648	3,47,536	.....

* This is exclusive of Rs. 5,00,000 utilized towards writing off a portion of the Plague expenditure.
(a) Do. „ 3,10,052-7-4 do do. do.
(b) Do. „ 1.00,000 do. the balance do.
(c) This is exclusive of Rs. 35,455 being the write-off of the proportionate cost (paid out of Loan Funds) of the Halalkhores' chawl at Vincent Road sold to the City Improvement Trust.

D. ROBERTSON,
Acting Chief Accountant.

P. W. MONIE,
Municipal Commissioner.

REVENUE.

Report on the working of the Assessment and Collection Department for the year 1918-19 by Mr. E. M. Taleyarkhan, Acting Assessor and Collector, forwarded with his No. A & C/616D, dated 12th June 1919. During the year under report Khan Bahadur B. D. Banaji was Assessor and Collector.

1. The total amount collected under all heads, exclusive of tolls, miscellaneous receipts and fees was Rs. 1,25,25,410-2-0 against the estimate of Rs. 1,08,86,850-0-0 a difference of Rs. 16,38,560-2-0, detailed as under:—

Taxes.	Estimate.	Actual collections including adjustments.	Increase.
	Rs.	Rs. a. p.	Rs. a. p.
General Tax...	62,43,850	75,16,968 14 11	12,73,118 14 11
Water Tax*	27,11,000	28,62,861 11 6	1,51,861 11 6
Halalkhore Tax	16,60,000	18,39,670 7 7	1,79,670 7 7
Wheel Tax	2,72,000	3,05,909 0 0	33,909 0 0
Total ...	1,08,86,850	1,25,25,410 2 0	16,38,560 2 0

* Exclusive of meter hire and receipts by the Hydraulic Engineer.

2. As compared with the total collections for 1917-18, *viz.*, Rs. 1,02,38,011-15-3, the collections for 1918-19, *viz.*, Rs. 1,25,25,410-2-0 are more by Rs. 22,87,398-2-9.

3. On 31st March 1919, the outstandings for property taxes, charges for water by meter and wheel tax (private) were Rs. 6,13,736-2-3 (of this Rs. 4,32,395 were paid by the Port Trustees on 31st March 1919 after Bank hours) against Rs. 67,983-7-10 on 31st March 1918, of which Rs. 5,29,521-2-3 have been collected or adjusted up to 31st May 1919, leaving at that date Rs. 84,215-0-0 outstanding for all previous years. Out of this sum Rs. 330-5-4 are irrecoverable and Rs. 53,178-11-0 are disputed as under:—

Particulars.	Bills.	Amount.
		Rs. a. p.
Claims presented to the Official Assignee and Receivers in cases of Insolvents, &c.	13	106 9 11
Disputes about valuations owing to Rent Act	47	9,300 0 8
Disputes about valuations and water by meter, etc.... ...	559	43,772 0 5
Total ...	619	53,178 11 0

4. Properties in the Assessment Book on 31st March 1919 were 64,670 as under against 63,843 on 31st March 1918:—

Buildings	41,550
Salt pans	97
Lands (including tanks, wells, &c.)	23,023
Total ...	64,670

Of this number 53,799 were assessed for the General Tax, 2,444 were exempted under Section 143 (1) (A) (B) of the Municipal Act, 6,558 were not charged the General Tax, being small plots of waste lands, houses marked "Unfit for human habitation," the assessments of which were temporarily reduced to a nominal value of Rs. 6, for which no bills were issued. The number of Municipal properties which are not assessed under Section 143 (1) (*b*) of the Act is 1,869.

5. The number of buildings newly erected, demolished and enlarged in 1918-19 was 887, 713 and 589, respectively, the corresponding numbers for the year 1917-18 being 1,234, 1,014 and 551.

6. The assessments of properties contrasted with those of 1917-18 were :—

Year.	Original Assessment (Gross).	Amounts after disposal of complaints.		Amount of subsequent reduction during the year by demolition and on complaints.	Gross amount after deduction of subsequent reduction.	Subsequent enhancement (new buildings, enlargements and under assessments) (Gross).	Total Gross Assessment.	Increase—Final difference over preceding year's gross assessment.	Rateable Assessment.	Classification of Rateable Assessment.			
		No. of complaints against opening Assessment.	Gross Assessment.							Chargeable with General Tax.	Exempted from General Tax, Section 143 (1) (*a*) and (*b*).	For which no General Tax bills issued.	Total Rateable Assessment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1917-18	6,63,15,368	3,608	6,68,16,417	7,55,841	6,60,60,576	19,67,425	6,80,28,001	26,14,146	6,12,34,537	5,84,64,896	27,56,008	13,633	6,12,34,537
1918-19	7,34,77,310	4,975	7,37,81,843	10,89,540	7,26,92,303	1,02,82,827	8,29,75,130	1,49,47,129	7,46,87,830	7,16,19,442	30,54,635	13,753	7,46,87,830

7. There were 3,238 complaints against assessments made from 1st April and 1,737 complaints against assessments made during the currency of the year, making a total of 4,975 complaints against 3,608 complaints in 1917-18.

8. The following tables give the increases and decreases in property taxes levied as compared with those of 1917-18 :—

General Tax.

1917-18.				1918-19.				
9⅓ per cent.	Compounded sum payable by Government under Section 144 (3).	Compounded sum payable by Port Trustees, under Section 145 (3).	Total of columns 1, 2 and 3.	9⅓ per cent.	Compounded sum payable by Government under Section 144 (3).	Compounded sum payable by Port Trustees under Section 145 (3).	Total of columns 5, 6 and 7.	Increase (Difference between columns 4 and 8.)
1	2	3	4	5	6	7	8	9
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
51,50,045 11 8	2,52,550 9 6	3,70,786 9 0	57,73,382 5 2	60,16,688 5 6	2,52,550 9 6	*8,03,181 0 0	70,72,419 15 0	12,99,037 9 10

* *N. B.*—Apart from this sum Port Trustees paid during the year Rs. 9,93,128 being the amount of enhanced contribution for the years 1914-1915, 1915-1916, 1916-1917 and 1917-1918 due to the opening for traffic of the Port Trust Railway and the Alexandra and Hughes Docks.

The amount of General Tax on properties exempted from its payment under Section 143 (1) (*a*) and (*b*) is Rs. 3,01,645-3-11 against Rs. 2,72,155-13-6 in 1917-1918.

Water Tax.

1917-18.				1918-19.				Difference.			
On rateable value @ 3 per cent.	Compounded.	On meter measurement.	Total of columns 1, 2 & 3.	On rateable value @ 3 per cent.	Compounded.	On meter measurement.	Total of columns 5, 6 & 7.	On rateable value (increase).	Compounded (decrease).	On meter measurement (increase).	Difference between columns 4 & 8 (increase).
1	2	3	4	5	6	7	8	9	10	11	12
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
11,93,025 14 6	Rs. 13,387 0 5	Rs. 14,26,062 12 9	Rs. 26,32,475 11 8	Rs. 13,52,482 7 9	Rs. 18,539 15 3	Rs. 15,09,375 1 10	Rs. 28,80,390 8 10	Rs. 1,59,456 9 3	Rs. 5,145 14 10	Rs. 83,312 5 1	Rs. 2,47,914 13 2

Halalkhore Tax.

1917-18.			1918-19.			Difference between columns 3 and 6 (increase).
On rateable value at 3 per cent.	On special service.	Total of columns 1 & 2.	On rateable value at 3 per cent.	On special service.	Total of columns 4 & 5.	
1	2	3	4	5	6	7
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
15,11,392 7 1	1,02,396 11 10	16,13,789 2 11	17,55,753 2 11	1,07,992 8 3	18,63,745 11 2	2,49,956 8 3

9. The total demand on account of property taxes amounted to Rs. 1,18,16,556-3-0 (including Government and Port Trust) to which is to be added Rs. 15,819-6-6 on account of previous years, Rs. 9,93,128-0-0, on account of supplementary claims for previous years in respect of the Port Trust properties making a total of Rs. 1,28,25,503-9-6 from which sum Rs. 44,322-4-5 were allowed as one-fifth drawback of the General Tax under Section 158 (2) of the Municipal Act. The total number of claims for one-fifth drawback was 6,120, the corresponding number for the year 1917-18 being 7,573.

10. For these taxes 136 bills for Rs. 15,819-6-6 were issued for previous years and for 1918-19, 76,101 bills for Rs. 1,07,16,502-5-1 (excluding Government and Port Trust, for which no bills are issued, the amounts being paid direct into the Chief Accountant's Office), were issued, making a total of 76,237 bills for Rs. 1,07,32,321-11-7.

11. The outstanding balance for property taxes for all years on 31st March 1918 was Rs. 64,026-2-6. During 1918-19, bills for these taxes, amounting to Rs. 1,07,32,321-11-7, were issued. Government and Port Trust contributions were Rs. 20.48,859-9-6 (*viz.*, Rs. 2,52,550-9-6 and Rs. 17,96,309-0-0, respectively). Thus the total demand amounted to Rs. 1,28,45,207-7-7.

12. Of this amount Rs 1,22,19,501-2-0 were collected, *i.e.*, Rs. 55,564-8-7 for former years. Rs. 9,93,128-0-0 on account of supplementary claim for previous years in respect of the Port Trust properties and Rs. 1,11,70,808-9-5 for 1918-19, leaving uncollected the sum of Rs. 6,25,706-5-7. Deducting from this amount Rs. 22,463-14-0 on account of bills recalled and cancelled, the balance outstanding on 31st March 1919 was Rs. 6,03,242-7-7.

13. The outstandings on 31st March 1919 were Rs. 1,817-2-5 on account of former years and Rs. 6,01,425-5-2 for 1918-19, (*viz.*, Rs. 4,32,395-0-0 Bombay Port Trust contribution and Rs. 1,69,030-5-2 in respect of private properties) making a total of Rs. 6,03,242-7-7.

Tax on Vehicles and Animals.

14. The demand on account of the tax on private vehicles and animals for the four quarters ended 31st December 1918 was Rs. 3,12,875-5-4 against Rs. 2,84,770-8-0 for 1917, to the first sum are to be added Rs. 3,957-5-4 outstanding on 31st March 1918 and amended demand aggregating Rs. 459-5-4 for former years, making a total of Rs. 3,17,292-0-0 for recovery. 22,614 bills were issued during 1918-19. The amount collected was Rs. 3,05,909-0-0, leaving Rs. 11,383-0-0 uncollected of which Rs. 191-0-0 and annas 4 for notice fee, were written off under Standing Committee's Resolutions Nos. 804, dated 1st May 1918, 2991, dated 31st July 1918, and 5101, dated 30th October 1918, and Rs. 698-5-4 were on account of bills recalled, for amendment amended bills being issued, making a total of Rs. 889-5-4, which deducted from Rs. 11,383-0-0 leaves Rs. 10,493-10-8 outstanding at the end of the year.

15. During the year there were taxed 3,525 four-wheeled vehicles, 1,201 two-wheeled vehicles, 1,056 vehicles not drawn by horses, etc, 2,332 motor cars, 175 motor cycles, 166 motor cycles with side cars, 5,992 horses (including those in Commission Stables), 167 ponies, 1,661 bullocks, and 22 buffaloes.

16. The following table shows the total demands, collections and balances on account of property taxes and tax on private vehicles and animals:—

Year.	Opening outstanding Balance.	Demand assessed for the year and for former years.	Total.	Bills written off under Standing Committee's Resolutions and Bills recalled for amendment.	Collections.	Outstanding Balance on 31st March 1919.
1	2	3	4	5	6	7
1918-19.	Rs. a. p. *67,963 7 10	Rs. a. p. 1,70,94,515 15 9	Rs. a. p. 1,31,62,499 7 7	Rs. a. p. 23,383 8 4	Rs. a. p. 1,25,25,410 9 0	Rs. a. p. 6,13,736 9 3

* *N.B.*—This figure includes Rs. 4,32,395 paid by the Port Trustees on 31st March 1919 after Bank hours.

17. The miscellaneous receipts for Notices, Warrants, Battaki Fees and other small items amounted to Rs. 5,845-8-6 against Rs. 5,908-1-1 in 1917-18. The receipts for Meter Hire were Rs. 33,549-14-11 against Rs. 33,646-8-0 in 1917-18.

18. Certificates of refund of taxes for 1918-19 and for former years were issued as under :—

	Rs.	a.	p.
General Tax	16,396	10	0
Water Tax...	4,718	7	0
Halalkhore Tax	6,302	12	3
Wheel Tax...	109	0	0
Meter Hire...	243	6	4
Notice Fee...	1	0	0
Total ...	27,771	3	7

19. The appeals filed against the valuations for 1918 to the Chief Judge of the Small Causes Court were as under :—

1 against the valuation fixed on complaint in 1917-18 for 1918-19 and 18 against the amendment under Section 167 of the Municipal Act during the currency of the year against 8 and 2 respectively in 1917-18. Out of these 19 appeals 14 were settled out of Court and withdrawn by the appellants and in one case the valuation was reduced by the Small Causes Court, in 2 cases the appeals were dismissed and Rs. 51 were awarded in each case to the Municipality by the Small Causes Court as court costs and in 2 cases the appeals are pending.

20. The right of collecting the toll at the Mahim and Sion Causeways was sold in 1918-19 for Rs. 25,000 (from 1st August 1918 to 31st July 1919) against Rs. 23,500 in 1917-18. The total income in 1918-19 under this head was Rs. 24,500 against Rs. 22,375 in 1917-18.

On 1st April 1919 the gross assessment was Rs. 8,38,01,987.

E. M. TALEYARKHAN,

Ag. Assessor and Collector.

No. T. D/ 158/A/OF 1919-20.

BOMBAY MUNICIPALITY, *13th July* 1919.

To

P. W. MONIE, ESQ., M.A., I.C.S.,
MUNICIPAL COMMISSIONER FOR THE CITY OF BOMBAY.

SIR,

I have the honour to submit the Annual Report on the work done by the Town Duty Refund Branch of the Assessment and Collection Department during the year 1918-1919.

1. The rates of the duty leviable on the various dutiable articles were the same as in the previous year.

2. As the Port Trustees and the Railway Companies send in no Annual Reports of the town duties collected by them on behalf of the Municipality, it is usual for this office to submit the accompanying two statements "A" and "B" compiled, in so far as the gross collections are concerned, from the figures supplied by the Chief Accountant.

3. The following table compares the total results for the year under report with those for the previous year :—

Year.	Gross Revenue.	Total Refund.	Net Revenue.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
1917-18	45,55,335 2 2	23,43,240 11 0	22,12,094 7 2
1918-19	40,90,800 6 9	23,71,991 6 0	17,18,809 0 9

4. The total net revenue of Rs. 17,18,809-0-9 shows a decrease of Rs. 4,93,285-6-5 from that of the previous year. The decreases are under the heads of Sugar, Wines and Spirit, Ghee and Timber as shown below :—The decrease is due to less import during the year under report.

Names of Articles.	Increase.	Decrease.
	Rs. a. p.	Rs. a. p.
Grain and flour	38,460 12 1	.....
Sugar	.....	1,95,610 6 9
Wines and Spirit	.....	53,957 13 0
Ghee	.. ...	1,24,330 11 7
Timber	.....	1,69,037 0 1
Firewood	8,054 13 0	.....
Beer	3,134 15 11	.....
Total ..	49,650 9 0	5,42,935 15 5 49,650 9 0
	Net decrease Rs.	4,93,285 6 5

5. The scheme of marking sugar bags with the Municipal stamps was continued throughout the year, the total number of bags marked being 15,94,066.

6. The number of claims to refund dealt with during the year was 54,435 as against 54,170 in the previous year.

I have the honour to be,
Sir,
Your most obedient servant,

E. M. TALEYARKHAN,
Acting Deputy Assessor and Town Duty Refund Officer.

Appendix A.

STATEMENT contrasting the Collections, Refunds and Net Revenue from Town Duties for the years 1917-18 and 1918-19.

NAME OF ARTICLE.	COLLECTIONS.				REFUNDS.								NET REVENUE.			
					1917-18.			1918-19.								
	1917-18.	1918-19.	Increase in 1918-19.	Decrease in 1918-19.	On account of Exports.	On account of articles supplied to Government.	Total.	On account of Exports.	On account of articles supplied to Government.	Total.	Increase in 1918-19.	Decrease in 1918-19.	1917-18	1918-19.	Increase in 1918-19.	Decrease in 1918-19.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Grain, at annas 6 per Candy	13,82,173 9 4	13,47,248 10 11	....	34,929 14 5	7,23,822 10 0	33,692 5 0	7,57,514 15 0	6,72,598 9 0	40,669 8 0	7,13,268 1 0	....	44,246 14 0	5,39,320 8 10	5,77,781 4 11	38,460 12 1	....
Flour, at annas 4½ per Candy	28,715 2 6	6,824 5 0	....	21,890 13 6	1,13,966 6 0	86 14 0	1,14,053 4 0	56,896 1 0	6,122 9 0	63,018 10 0	....	51,034 10 0				
Sugar, at annas 8 per Cwt.	17,42,543 7 3	15,75,620 5 6	....	1,66,923 1 9	11,02,852 5 0	1,02,612 1 0	12,05,494 6 0	12,25,732 15 0	8,448 12 0	12,34,181 11 0	28,687 5 0	....	5,37,049 1 3	3,41,438 10 6	....	1,95,610 6 9
Wines and Spirits, at annas 4 per Imperial Gallon	3,18,752 9 7	2,63,311 15 7	....	55,440 10 0	23,865 5 0	3,197 8 0	27,062 13 0	23,815 8 0	1,764 8 0	25,580 0 0	...	1,482 13 0	2,91,689 12 7	2,37,731 15 7	....	53,957 13 0
Beer, at pies 6 per Imperial Gallon ..	29,811 10 0	28,093 8 11	3,281 14 11	....	9,152 0 0	867 2 0	10,019 2 0	8,387 2 0	1,778 15 0	10,166 1 0	146 15 0	....	19,792 8 0	22,927 7 11	3,134 15 11	....
Ghee, at annas 10 per Bombay Maund ..	5,45,538 1 10	5,14,781 6 3	....	30,756 11 7	1,60,225 1 0	44,460 7 0	2,04,685 8 0	1,45,699 7 0	1,52,560 1 0	2,98,259 8 0	93,574 0 0	....	3,40,852 9 10	2,16,521 14 3	....	1,24,330 11 7
Timber, at 2½ per cent. on Market Value.	4,22,431 7 2	2,48,200 8 1	....	1,74,230 15 1	20,418 9 0	3,997 2 0	24,410 11 0	18,723 9 0	493 3 0	19,216 12 0	....	5,193 15 0	3,98,020 12 2	2,28,983 12 1	....	1,69,037 0 1
Firewood, at annas 2 per Candy	85,369 2 6	1,01,724 10 6	16,355 8 0	....	...	....	....	....	8,300 11 0	8,300 11 0	8,300 11 0	....	85,369 2 6	93,423 15 6	8,054 13 0	....
			19,637 6 11	4,84,172 2 4							1,30,708 15 0	1,01,958 4 0			49,650 9 0	5,42,935 15 5
				19,637 6 11							1,01,958 4 0					49,650 9 0
Total Rs. ..	45,55,385 2 2	40,90,800 6 9		4,64,584 11 5	21,54,297 4 0	1,83,948 7 0	23,43,240 11 0	21,51,852 3 0	2,20,188 3 0	23,71,991 6 0	28,750 11 0		22,12,694 7 2	17,18,809 0 9		4,93,285 6 5

E. M. TALEYARKHAN,

Acting Deputy Assessor and Town Duty Refund Officer.

Appendix B.

STATEMENT contrasting the Imports, Exports and Balance of the several articles subject to Town Duty during the year 1918-19 with those for 1917-18.

NAME OF ARTICLE.	IMPORTS.				EXPORTS AND SUPPLY TO GOVERNMENT BY CONTRACTORS.								BALANCE (LOCAL CONSUMPTION AND STOCK).			
					1917-18.			1918-19.								
	1917-18.	1918-19.	Increase in 1918-19.	Decrease in 1918-19.	Exports.	Supply to Government.	Total.	Exports.	Supply to Government.	Total.	Increase in 1918-19.	Decrease in 1918-19.	1917-18.	1918-19.	Increase in 1918-19.	Decrease in 1918-19.
Grain, at annas 6 per Candy .. Candies	36,85,796	35,92,649	.....	93,147	19,30,194	89,846	20,20,040	17,93,596	1,08,452	19,02,048	.....	1,17,992	12,61,191	14,90,798	2,29,607	.....
Flour, at annas 4½ per Candy .. Candies	1,02,098	24,264	.....	77,834	4,05,213	309	4,05,522	2,02,237	21,770	2,24,007	.....	1,81,455				
Sugar, at annas 8 per Cwt. .. Cwts.	34,85,087	31,51,240	.....	3,33,847	22,05,704	2,05,284	24,10,988	21,51,465	16,898	24,68,363	57,375	.....	10,74,099	6,82,877	.....	3,91,222
Wines and Spirits, at annas 4 per Imperial Gallon .. Gallons.	12,75,000	10,53,248	.....	2,21,752	95,461	12,790	1,08,251	95,262	7,058	1,02,320	.....	5,931	11,66,759	9,50,928	.....	2,15,831
Beer, at pies 6 per Imperial Gallon. Gallons.	9,53,972	10,58,994	1,05,022	.....	2,92,864	27,748	3,20,612	2,68,388	56,926	3,25,314	4,702	.....	6,33,360	7,33,680	1,00,320	.....
Ghee, at annas 10 per Bombay Maund. Maunds.	8,72,861	8,23,650	.....	49,211	2,56,360	71,137	3,27,497	2,32,119	2,44,097	4,77,216	1,49,719	.....	5,45,364	3,46,434	.....	1,98,930
Timber, at 2½ per cent on Market Value. Value Rupees.	1,68,97,758	99,28,020	.....	69,69,238	8,16,512	1,59,865	9,76,427	7,48,942	19,728	7,68,670	.....	2,07,757	1,59,20,831	91,59,350	.....	67,61,481
Firewood, at annas 2 per Candy .. Candies.	6,32,953	8,13,797	1,30,844	.....	.....	.....	.....	.....	66,405	66,405	66,405	.....	6,82,953	7,47,392	64,439	.....

E. M. TALEYARKHAN,

Acting Deputy Assessor & Town Duty Refund Officer.

PUBLIC WORKS.

No. M.C./2 A of 1919-20.

EXECUTIVE ENGINEER'S OFFICE,
BOMBAY, 25*th June* 1919.

To

THE MUNICIPAL COMMISSIONER
FOR THE CITY OF BOMBAY.

SIR,

I have the honour to forward the Administration Report of the Department under my control for the year 1918-19.

2. The report is divided under the following heads :—

	Paragraph Nos.
Municipal Building Construction	3—53
Schemes—Overbridges, roads, &c.	54—65
Miscellaneous Works (including Plague Measures) ...	66—74
Disposal of Town Sweepings	75—82
Drainage	83—166
Mechanical Branch	167—222
Roads	223—275
Footpaths	276—281
Tramways	282—284
Public Lighting	285—292
Private Building Construction (including setbacks.)..	293—311

MUNICIPAL BUILDING CONSTRUCTION.

Bathing Places.

3. The total cost of constructing the bathing place at the **Junction of Khetwadi Back Road and Khetwadi 2nd Lane** which was completed amounted to Rs. 1,404-0-2.

A site for constructing a bathing place at Dongri Street has been selected.

Markets.

4. An aggregate sum of Rs. 1,00,300 was provided in the **Loan Works** budget for extending and improving the **Arthur Crawford Markets** and it was proposed to construct a Poultry House and to make additions and alterations in the Beef Section of the Arthur Crawford Markets from this amount. Tenders for the Poultry House were invited and two were received, but they were rejected as they were very much in excess of the estimate. It is therefore proposed to re-invite the tenders for both of these works as soon as the prices of building materials become normal.

5. A sum of Rs. 10,000 having been provided in the budget under new works for constructing masonry stalls in the vegetable section of the **Arthur Crawford Markets**, tenders had been invited for the work and the lowest tender of Mr. Kanji Velji Mistri amounting to Rs. 9,974-4-0 was accepted under the Standing Committee's Resolution No. 6267 of 13th December 1918 and the work was in progress at the close of the year.

6. A sum of Rs. 5,000 was provided in the budget for constructing latrines and urinals for Europeans and Indians in the **Arthur Crawford Markets** and a sum of Rs. 1,459 provided in the budget for the year 1917-18 was also renewed. Tenders for the work were invited and the tender of Mr. Kanji Velji Mistri amounting to Rs. 6,767-1-2 was recommended for acceptance.

7. Tenders for the construction of a **Market at Dhobi Talao for selling Pork** were invited but rejected on account of excessive rates.

8. The Contractor Mr. Sambhaji N. Kalewar for the work of constructing a **Market on the west side of the Musjid Bunder Station** has practically completed the work.

9. Plans and estimates for the construction of the Chowpatty market were prepared.

10. Out of the two sheds sanctioned to be constructed at the **Bandra Slaughter Houses for the protection of the animals**, one has been built departmentally. Tenders for the construction of the 2nd shed were invited and the only tender from Messrs. Ramji Keshovji & Co., amounting to Rs. 6,290, was accepted under Standing Committee's Resolution No. 7507 of 29th January 1919.

11. A provision of Rs. 77,000 for carrying out improvements, constructing sheep pen, &c., was made in the budget, but on account of the high prices ruling, these works were not undertaken.

Cemeteries.

12. The work of filling in a further portion of the **Haines Road Hindu Cemetery** which had been commenced last year was completed by the Contractor Mr. Kundlic Panduji Banker at a cost of Rs. 4,475-6-10.

13. The work of filling in a portion of **Roman Catholic Cemetery at Haines Road** which had been commenced last year was completed during the year by the Contractor Mr. Abdul Karim Haji Karimbux.

14. A sum of Rs. 5,000 was provided in the budget under New Works for filling in a further portion of the **Haines Road Hindu Cemetery.** Tenders for the work were invited and the tender of Mr. Abdul Karim Haji Karimbux was accepted under the Standing Committee's Resolution No. 4428 of 2nd October 1918. The Contractor carried out the work by the 3rd January 1919 within the contract period.

15. Plans and estimates for the work of constructing a compound wall at the **Roman Catholic Cemetery at Haines Road** were submitted.

Stables.

16. The work of constructing **offices and stables for D Ward bullocks at Annesley Road** was kept in abeyance for want of funds.

Chawls.

17. Government having sanctioned the use of the land at **Palton Road** for the erection of **chawls** for the biggaries of the Health and Market Departments, tenders for the construction of two, out of five, chawls were invited and the lowest tender of Messrs. Ramji Keshovji & Co., amounting to Rs. 3,79,117-11-9 was accepted under the Standing Committee Resolution No. 8809 of 5th March 1919.

18. The accounts of the work of filling in the low-lying ground for constructing **chawls for the Health Department biggaries of F Ward at Dadar**, which was completed last year, were adjusted and the total cost amounted to Rs. 12,378.

19. The work of constructing the five ground floor chawls for the **Health Department biggaries of F Ward at Dadar** were nearly completed by the Contractors Messrs. Shroff & Co. at the close of the year.

20. The accounts of the work of constructing the **1st chawl for the Halalkhores at Valpakhady** were adjusted. The total cost of the work amounted to Rs. 91,735-6-10.

21. Messrs. Ramji Keshovji & Co., Contractors for the construction of the **1st chawl for Halalkhores at Valpakhady**, offered to carry out the work of constructing the foundations and the plinth of the **2nd chawl at Valpakadi** at their contract rates plus 25 per cent. The cost of the work was estimated at Rs. 19,980 and the offer was accepted by the Standing Committee under their Resolution No. 5254 of 6th November 1918. The work was nearly completed at the close of the year.

22. The final accounts of the work of constructing four **semi-permanent chawls for the Halalkhores of the Health Department at the Tardeo Flats**, which was completed last year, were adjusted. The total cost of the work amounted to Rs. 50,965-14-10.

23. A sum of Rs. 13,037 was provided in the budget for overhauling the roof of the **Chawl at Suklaji Street.** Tenders for the work were invited and the lowest tender of Mr. Hasonalli Kasam amounting to Rs. 16,849-15-7 was sanctioned by the Standing Committee under its Resolution No. 9172 of 12th March 1919. A transfer of Rs. 3,813 was sanctioned under Corporation Resolution No. 9301 of 13th March 1919 to meet the excess over the budget provision.

Offices.

24. The construction of **Ward Offices and quarters** for the various Municipal Departments has been kept in abeyance pending funds.

Staff Quarters.

25. The work of erecting quarters for **engine drivers, firemen and oilmen, &c., at the Love Grove Pumping Station** was kept in abeyance for want of funds.

Hospitals.

26. Government having approved plans and estimates for the construction of the four European Wards, Mortuary, Kitchen and Stores, &c., **at the Arthur Road Hospital** and having agreed to pay their cost tenders were invited and the lowest tender of Messrs. A. S. Evans & Co., amounting to Rs. 2,57,257-8-1, was accepted under Standing Committee Resolution No. 9472 of 19th March 1919. The Corporation under their Resolution No. 2510 of 11th July 1918 having also sanctioned a grant of Rs. 1,50,000 for constructing the Resident Medical Officer's and Nurses' quarters and Administration Block and for filling in the additional land to be acquired for the extension of the **Arthur Road Hospital,** tenders were invited for their construction.

27. The existing accommodation at the **Arthur Road Hospital** being found insufficient when a serious epidemic occurs, it was proposed to construct three additional wards each to hold 40 beds. A sum of Rs. 60,000 from surplus cash balance was sanctioned under Standing Committee's Resolution No. 9529 of 19th March 1919 and Corporation Resolution No. 9618 of 20th March 1919. The work was sanctioned to be entrusted to Messrs. Phatak & Walchand, Ltd., under the Standing Committee's Resolution No. 852 of 30th April 1919 without tenders being invited for the same. The work was in progress at the close of the year.

28. The accounts of the work of extending the verandah and improving the ventilation at the **Arthur Road Hospital** which was completed last year were adjusted. The total cost amounted to Rs. 3,236.

29. The work of constructing an Observation Shed at the **Bullock Hospital at Sankli Tank** which was commenced last year was completed at a cost of Rs. 3,162.

30. The accounts of the work of constructing a cook-room, water-closets and washing places at the **Maratha Hospital** which was completed last year were adjusted.

31. The total cost of the work amounted to Rs. 6,024-11-3.

Primary Schools.

32. The plans and estimates for the construction of the **Primary Schools at Babula Tank and Dongri Street,** which had been sent to Government, were not returned by them finally approved till the close of the year. In the meantime tenders were called for in January 1919, but as they were much in excess of the sanctioned estimates, they were rejected. The prices of building materials having risen considerably, revised estimates were being prepared at the close of the year with a view to submitting them to the Corporation and Government for approval.

33. The construction of the **Schools at Mustan Tank and DeLisle Road** was deferred pending funds.

34. A sum of Rs. 30,000 was offered by the Hon'ble Sir Ebrahim Rahimtulla, Kt., for the construction of a combined dispensary and school at Sandhurst Road. The offer was accepted by the Corporation under their Resolution No. 7922 of 9th March 1916. A sum of Rs. 10,400 was also provided in the budget as Municipal contribution for the work. Tenders for the work were invited, but as they were in excess of the above two sums, they were rejected.

Gardens.

35. Tenders for the work of carrying out certain additions and improvements in the **Tiger and Monkey Houses** in the **Victoria Gardens** were invited and the lowest tender of Mr. Kanji Velji Mistri amounting to Rs. 11,067-3-3, has been accepted under Standing Committee's Resolution No. 6599 of 23rd December 1918. The work was in progress at the close of the year.

36. The work of providing a **wrought iron fence at the Victoria Gardens** was postponed owing to the required materials not being available and the work of **providing expanded metal to the cast iron railing** was also postponed as a portion of the garden where the work is to be carried out has been included in the City Improvement Trust Scheme.

37. The final accounts of the work of fixing W. I. grills to the windows of the **Victoria and Albert Museum** which was completed last year were adjusted. The total cost amounted to Rs. 4,719.

Miscellaneous.

38. The final accounts of the work of constructing **latrines and urinals at the junction of Trimbak Parasram Street and 2nd Pathan Street** which was completed last year were adjusted. The total cost amounted to Rs. 8,050-14-4.

39. The work of providing a wooden screen **at the Municipal kutchra siding at Colaba** has been carried out departmentally by the Municipal Workshops instead of through the Petty Works Contractors at a cost of Rs. 3,591-4-10.

40. The work of constructing two wards at the **Acworth Leper Asylum at Matunga** which was in progress last year was completed by the Contractor Mr. Shamsundar Baloji.

41. Tenders for the work of erecting a fountain at the junction of **Sandhurst Road and Dongri Street** were reinvited but none was received. Efforts were made to obtain private quotations and one was received, but the amount of the quotation was in excess of the amount of the donation, *viz.*, Rs. 3,900. The work was therefore postponed till the prices of building materials become normal.

42. The building and repair works entrusted to the Annual Repairs and Petty Works Contractors during the year amounted to Rs. 74,527-10-7.

43. The work of providing covers over wells in the City which was in progress at the close of the last year was completed by the Contractors Messrs. Ramji Keshavji & Co., during the year under review.

44. The work of constructing fire-proof sheds for storing petrol in the compound of the Municipal Office buildings which was in progress last year was completed at a cost of Rs. 272-7-1.

45. The accounts for the work of constructing a portion of the compound wall along the roadside of the **Haines Road Fire Brigade Station** were adjusted. The total cost amounted to Rs. 2,149.

46. The work of shifting the fence of the **Babula Tank Fire Brigade Station** has been carried out at a cost of Rs. 1,536-10-2.

47. A sum of Rs. 1,420 was provided in the budget for the construction of the stores rooms in the **Hindu and Mahomedan Cemeteries at Tank Bunder and Reay Road** respectively. The budget provision being found insufficient according to the Petty Works Contractors' rates a transfer of Rs. 688 was sanctioned under the Standing Committee's Resolution No. 4302 of 25th September 1918. The work was entrusted to the Petty Works Contractors.

48. A sum of Rs. 910 was provided in the budget for the construction of two chowkies for the Cemetery clerks at Tank Bundar and Reay Road. The budget provision being found insufficient according to the Petty Works Contractors' rates a transfer of Rs. 822 was sanctioned under the Standing Committees' Resolution No. 5324 of 7th November 1918. The work was entrusted to the Petty Works Contractors and was in progress at the close of the year.

49. The work of filling in the land and constructing a toll chowki at Sion for the Assessment Department was completed at a cost of Rs. 2,743-1-0.

50. The work of tar macadamising the yard of the **Arthur Road Stables** has been carried out at a cost of Rs. 1,430.

51. The work of providing glazed shutters to the walls of the stable at the **Sick Bullock Hospital at Sankli Tank** has been carried out at a cost of Rs. 2,235-1-1.

52. The painting works entrusted to the Painting Contractor during the year amounted to Rs. 13,967-4-2.

53. In addition to the works referred to above, plans and estimates in the following cases were prepared by the Architectural Branch (works costing less than Rs. 3,000 not being included):—

ESTIMATES.

	Description.	Estimated amount.
	Markets.	
		Rs.
1.	Masonry stalls in vegetable section of A. C. Markets	13,570
2.	Alterations in the market at Colaba	11,980
3.	Proposed market at Gilder Tank site	4,20,400
4.	Do. at Matunga	98,650
5.	Do. at Chowpatty...	2,00,000
	Latrines, Urinals and Bathing Places.	
6.	Latrines and urinals at Town Hall and Customs House ...	16,306
7.	Do. at Arthur Bundar, Colaba	12,250
8.	Proposed washing place at Dongri Street	6,270
	Hospitals.	
9.	R. M. O.'s and Nurses' quarters and Administration Block at the Arthur Road Hospital	1,30,405
10.	Four European wards, &c., at Arthur Road Hospital ...	2,70,460
11.	Tuberculosis wards at do. ...	93,200
12.	Kitchen and stores for four European wards at Arthur Road Hospital	11,763
13.	Removing and reconstructing 3 temporary wards, compound fence, &c., at Arthur Road Hospital	3,532
14.	Dispensary and Registration Office at Souter Street	53,110
15.	Do. at Fanaswady	35,000
16.	Removing Health Camp, &c., at Arthur Road Hospital ...	4,981
17.	Constructing 3 temporary wards (120 beds) at Arthur Road Hospital	53,190
	Quarters, Offices and Chawls.	
18.	Proposed stable and offices, &c., at Purbhadevi Road... ...	44,900
19.	Do. begaries' chawl (20 rooms) at Bapty Road... ...	10,100
20.	Ground and 1st floor chawl for begaries at Dadar	2,90,000
21.	Semi-permanent 3 chawls for begaries (84 rooms) at Arthur Road	69,650
22.	Halalkhores' 2nd chawl at Valpakhadi	1,36,700
23.	Additions and alterations to the existing office and constructing new office for Road Department at Mint Road	83,300
24.	Chawls (100 rooms) for begaries, office, store rooms, &c., at Agripada	1,45,500
25.	Offices and stable, &c., at Annesley Road (Revised Estimate)...	3,74,900
26.	Labourers' chawl with drainage, &c., at the Bandra Slaughter Houses	16,465
27.	Labourers' chawl (20 rooms) at the Love Grove Pumping Station, Worli	4,178
	Cemeteries.	
28.	Filling in a further portion of the Hindu Burial Ground at Haines Road	5,000
29.	Compound wall of the Roman Catholic Cemetery at Haines Road	25,690
30.	Extending the Grave diggers' chawl at the Hindu Cemetery at Haines Road	9,210
31.	Filling in the low-lying ground at the Roman Catholic Cemetery at Haines Road	29,150

Miscellaneous—contd.

	Description.	Estimated amount.
		Rs.
	Gardens.	
32.	Addition to the Tiger enclosure in the Victoria Gardens ...	5,710
33.	Extensions, &c., to the existing Lion and Tiger enclosure in the Victoria Gardens*	17,823
34.	New roofs in the existing Monkey House in the Victoria Gardens	5,310
	Bandra Slaughter House.	
35.	Fixing W. I. fence on the north and west side of Mutton Houses at Bandra Slaughter Houses	7,137
36.	Filling in the low-lying ground at the Bandra Slaughter Houses, &c. (Revised Estimate)	51,850
37.	Certain additions and alterations to the Mutton Slaughter House, Lethal Chamber, new Sheep pen, Labourers' chawl, &c., at the Bandra Slaughter Houses	76,900
	Miscellaneous.	
38.	Filling in the Bhuleshwar Tank	10,500
39.	Petrol sheds for Municipal Workshops (1,000 gallons) at Foras Road...	3,738
40.	Fire resisting Petrol and Carbide stores for Workshops at Foras Road	4,844
41.	Converting Municipal Commissioner's Record Room by providing flooring and dormers in the existing roof of the Municipal Office building	7,000
42.	Proposed shed, &c., for Lightning Crusher at Carnac Bunder (South)	1,22,000
43.	Construction of a Carcass shed at the Tardeo Flats	6,740
44.	Removing the existing Health Camp and reconstructing the same at the Arthur Road Hospital (North)	4,680
45.	Filling in the low-lying ground at Tardeo Road	8,400
46.	Proposed godowns for oil, cement, &c., at Tardeo Flats ...	1,39,500
47.	Rat-proof grain godown at Sewree	12,500
48.	Filling in the Arthur Road Tank	90,000
49.	Do. the Naigam Tank	49,050
50.	Extension of the old Dhobighat (40 stones) at Mahaluxmi ...	31,406

Plans.

Serial No.	Description of plans.
1.	Plan showing the site and proposed new chawls for halalkhores at Valpakhady.
2.	Proposed Pergola at Malabar Hill Gardens.
3.	Plan showing fire-resisting petrol shed for Municipal Workshops.
4.	Plan of the proposed Nurses' quarters at the Arthur Road Hospital.
5.	Do. do. Administration Block at the Arthur Road Hospital.
6.	Plan showing the proposed European wards at the Arthur Road Hospital.
7.	Do. Tuberculosis ward at the Arthur Road Hospital.

Serial No.	Description of plans.
8.	Plan of the new Bullock stable at Purbhadevi Road near the Night Soil Depot.
9.	Plan of masonry stalls in the vegetable section in the Arthur Crawford Markets.
10.	Plan showing the complete scheme for European and Indian wards, Nurses' and servants' quarters &c., at the Arthur Road Hospital.
11.	Proposed wooden railing at the Bandra Slaughter House.
12.	Plan of proposed chowki for the Drainage Department near the open drain at Tardeo Flats.
13.	Plan of the proposed additions, &c., to the Tiger enclosure in the Victoria Gardens.
14.	Plan of the proposed additions to the Lion enclosure in the Victoria Gardens.
15.	Do. do. new roof over the Monkey House in the Victoria Gardens.
16.	Do. do. extension of the Muster Roll Shed at the Arthur Road Hospital.
17.	Do. do. shops at Abdul Rehman Street.
18.	Do. do. latrines at Arthur Bundar, Colaba.
19.	Do. do. additional urinals to the existing block at the Arthur Crawford Markets.
20.	Plans of latrines and urinals for Europeans at the Arthur Crawford Markets.
21.	Plan of the proposed additional 40 stones for the Dhobighat at Mahaluxmi.
22.	Site plan for the proposed Health Camp and temporary wards (to be shifted from Arthur Road Hospital) at Arthur Road.
23.	Plan of the proposed extension to the Grave diggers' chawl at Haines Road Hindu Cemetery.
24.	Plan of barbed wire fencing at the Haines Road Catholic Cemetery.
25.	Plan of the proposed shed for Lightning Crushers at the Carnac Bridge.
26.	Do. do. alteration of the Colaba Market into Health Department stable.
27.	Plan of the site for Central Stores and Pipe Depot at Tardeo Flats.
28.	Do. do. proposed washing place at Dongri Street.
29.	Do. do. rat-proof grain godown to be constructed in the City.
30.	Do. do. compound wall for the Roman Catholic Cemetery.
31.	Block plan showing the proposed compound wall for the Roman Catholic Cemetery.
32.	Plan of the proposed store room and office at the Tank Bundar Cemetery.
33.	Plan showing the site of the proposed semi-permanent chawls at Cleveland Bundar.
34.	Plan of chawls proposed to be constructed at Cleveland Bundar.
35.	Plan of the proposed market at Chowpatty.
36.	Plan showing details of windows for Tiger enclosure in the Victoria Gardens.
37.	Plan of the proposed gate and two ladders for the Roman Catholic Cemetery.
38.	Do. do. market at Gilder Tank site.
39.	Plan showing details of sliding door for Tiger enclosure in the Victoria Gardens.
40.	Plan of filling in the tank opposite Arthur Road Hospital.
41.	Plan of the conversion of the Municipal Commissioner's record-room into office for the Executive Engineer's Department.
42.	Plan of the proposed mortuary and post-mortem room for the European ward at Arthur Road Hospital.
43.	Plan of the proposed kitchen and store room for the European ward at the Arthur Road Hospital.
44.	Plan of the proposed additions and alterations to the sweepers' chawl at Sukhlaji Street.
45.	Plan of the proposed extension to the Municipal Office building.

SCHEMES—OVERBRIDGES, ROADS, &c.

Overbridges.

54. Curry Road Overbridge has proved a very useful connection between Parel Road and Delisle Road. The western approach will remain of a temporary character until the bridge over the B. B. & C. I. Railway Company at Parel Station is constructed.

55. In connection with the improvement of Mahaluxmi Station the Railway Company have submitted a plan showing proposed overbridges at both Clerk Road and Haines Road. The land for an overbridge at Clerk Road is available, but very great expenses will be entailed in acquiring properties and in diverting and covering over main sewers and large storm water drains should the Haines Road Overbridge be entertained. A scheme for the construction of a single bridge of adequate dimensions to take the place of the two bridges mentioned has been prepared and is under consideration.

Delisle Road Overbridge.

56. The required properties along Delisle Road have been acquired and the work of diverting the drains, sewers, water mains, gas mains, cables into the low level roads is in progress.

Dadar Road Overbridge.

57. Plans and estimates for the bridge are being prepared.

Elphinstone Road Overbridge.

58. In connection with the land acquired from Messrs. Narma Brothers, cases in the Small Causes Court and High Court against the Municipality were dismissed with costs.

59. The properties acquired in connection with the Overbridges which have not been pulled down continue to be rented to tenants.

60. The certified expenditure paid by the Municipality during the year for all the overbridges amounted to Rs. 26,849-7-1.

Roads.

61. *Widening Church Gate Street.*—The properties are being acquired. The total expenditure incurred during the year amounted to Rs. 3,21,427-11-1.

62. *Through road from Worli to Mahim.*—Most of the properties have been acquired and the work of constructing the road is well in hand.

The total expenditure incurred during the year amounted to Rs. 1,76,262-7-3.

63. *Widening Sonapur Lane.*—The properties are being acquired. The expenditure incurred amounted to Rs. 18,447.

64. *Widening of Masjid Bunder Road, Nakhoda Street and Abdul Rehman Street.*—Negotiations for the acquisition of land are proceeding.

65. *Improving Queen's Road and the surroundings of the Church Gate Station.*—This work was in progress at the close of the year.

MISCELLANEOUS WORKS.

Love Grove Sewerage Outfall Works.

66. During the past year the construction of the New Outfall was proceeded with as weather permitted, the total length of twin-barrel steel pipe section constructed to date being 926 lin. feet carrying the Outfall forward to a distance of 1,968 lin. feet from the Engine House.

67. The remarks regarding the weather and sea in the Annual Report for 1917-18 apply with equal force to the past year.

68. Out of the 365 days of the year, work on the Outfall was quite impossible for 211 days, partially possible for 71 days and possible for only 83 days. In comparison with last year's report these figures suggest that the weather for the year under review was calmer than for the previous year, but this is only apparent and is accounted for by the fact that the work is now being carried on in slightly deeper water in which diving work is oftener possible.

69. Epidemics and consequent labour scarcity hampered work to a certain extent.

70. Quarrying operations at the foreshore were continued during the year supplying materials to the Outfall works and to the Road Department, the total quantity supplied to the latter for the year being 8,363 tons.

Plague and Cholera Measures undertaken during the Year 1918-1919.

71. The following camps were erected on the Municipal land at a cost of Rs. 2,400 and were provided with latrines, water supply and lighting arrangements at Municipal expense.

1.	North-east of Chinch Bunder	Nos.	20
2.	Annesley Road	„	50
3.	Mahim Garden	„	50
	Total number of rooms for (Plague) Health Camp ...		120

72. A camp of 100 rooms was erected at a cost of Rs. 2,000 for the accommodation of Cholera patients on Municipal land near the Arthur Road Municipal Chawl.

73. The Health Camps which existed at the undermentioned places in the previous years were maintained at the Municipal expense during the year under report:—

		No. of rooms.
	On Municipal land.	
1.	Suklaji Street	20
2.	Arthur Road	71
3.	Chinchpokly Road	100
4.	Mahim Station	37
	On Government land.	
5.	2nd Koli Lane, Colaba	20
	Total number of rooms. ...	248

74. The total cost of repairing and maintaining these camps amounted to Rs. 4,395-9-7.

DISPOSAL OF TOWN SWEEPINGS.

Kutchra Reclamation Works at Deonar.

75. The additional area reclaimed during the year was about eight acres, bringing the total to 201 acres, leaving a balance of 622 acres yet to be reclaimed.

76. The rights of cultivating the reclaimed land and fishing in the Khajan land for the year 1919-20 were sold at the end of the year and fetched respectively Rs. 11,000 and Rs. 3,500 as against Rs. 7,000 and Rs. 2,600 realised for the previous year.

77. There was fortunately no railway accident during the year.

78. Fires took place in the kutchra deposit on three occasions, *viz*, on 3rd March 1918, 23rd October 1918 and 3rd January 1919, but there was no loss of human life or Municipal property.

79. Only one kutchra train was run throughout the year. The engine detention charge, Rs. 5 per hour per trip was paid almost throughout the year, the temporary siding being too long to allow the shunting operations to be done within the stipulated time of 30 minutes.

80. There were 9 fatal cases of small-pox in the unloading workmen's camp at Deonar in April 1918. During the Influenza Epidemic of October 1918, 36 persons succumbed to it and in January 1919 Cholera broke out and proved fatal in 5 cases.

81. A free school for low caste children within the camp has been conducted by the Depressed Class Mission, Bombay, for the last 12 years and is well attended.

82. A kutcha road was constructed in the Skinning Ground compound at Kurla at a cost of Rs. 1,922-6-6.

DRAINAGE.

Construction of Sewers, Drains and Public Conveniences.

83. The first, second and third sections of the Ovoid Sewer in connection with the Duplication of the Tansa Main were in use during the year.

84. The total certified expenditure on the three sections upto the end of the year amounted to Rs. 8,91,098-1-9. As stated in the last report all the main works at Love Grove in connection with the measures for relieving the surcharging of sewers have been completed, only some subsidiary works having had to be postponed owing to the difficulty in procuring the necessary articles from England on account of the War.

85. The total certified expenditure upto the end of the year including that on the subsidiary works amounted to Rs. 17,05,172-9-0.

86. A revised estimate amounting to Rs. 3,68,096 having been sanctioned by the Corporation for constructing an Ovoid Sewer from Matunga Station to the North of Dadar Station, tenders were invited for the same and the lowest tender of Mr. Vithal Sayana amounting to Rs. 3,58,490 was accepted under the Standing Committee's Resolution No. 5924 of 29th November 1918 and the work was progressing satisfactorily at the end of the year.

87. The total certified expenditure upto the end of the year amounted to Rs. 87,573-5-8.

88. No further claims for the pieces of lands for the extension of the Low-Level Channel No. 11 from DeLisle Road to Dadar Road through which the channel was constructed, under the powers reserved to the Municipal Commissioner under Section 222 of the Municipal Act, were preferred during the year.

89. The total certified expenditure upto the end of the year amounted to Rs. 2,84,489-3-7.

90. A further provision having been made in the Budget for 1918-1919 for the work of regrading and covering the old storm-water drain from Foras Road to Falkland Road, and constructing a storm-water drain in Annesley Road, tenders were invited and the lowest tender of Messrs. Krishnaji Chinoo and Sons amounting to Rs. 15,630 was accepted under the Standing Committee's Resolution No. 7508 of 29th January 1919.

91. The work was progressing satisfactorily at the end of the year, the contract period for the completion of the work being upto the 2nd May 1919.

92. The total certified expenditure upto the end of the year including the 1st part of the work amounted to Rs. 21,671-14-6.

93. Owing to serious flooding in Chinchpokli Road and in the portion of Parel Road between Connaught Road and Chinchpokli Road, it was proposed to construct a 4 feet circular storm-water drain in Parel Road from Chinchpokli Road to Connaught Road. The first portion of the work from Connaught Road to Ulster Road to the extent of Rs. 25,000 provided in the Budget for 1917-1918, was completed by the Contractors, Messrs. Haji Ahmed Haji Sulleman & Co., on 31st May 1918. A further provision having been made in the Budget for the year 1918-1919 for the remaining portion of the work from Chinchpokli Road to Ulster Road, tenders were invited and the lower tender of Messrs. Haji Ahmed Haji Sulleman & Co, amounting to Rs. 33,850, was accepted under the Standing Committee's Resolution No. 6268 of 13th December 1918. The work was completed on 14th March 1919, the contract date for its completion being 7th April 1919.

94. The total certified expenditure upto the end of the year amounted to Rs. 46,482-2-4.

95. The work of constructing a storm-water drain with half-sized water entrances and water tables in Currey Road was completed departmentally on the 15th September 1918.

96. The total certified expenditure upto the end of the year amounted to Rs. 23,738-7-3.

97. The work of laying pipe sewers in Mahim District and constructing a Septic Tank and a Hopper near the Foreshore at Mori Road, Mahim, was completed by Messrs. Haji Ahmed Haji Sulleman & Co. on 29th June 1918, the Contract date for its completion being 17th July 1918.

98. The total certified expenditure upto the end of the year amounted to Rs. 45,079-2-0.

99. To remedy the flooding at the junction of Kalachowky Road and Parel Road it was proposed to construct a storm-water drain at the junction of Kalachowky Road and Parel Road. Tenders were invited thrice but none were received. It has, therefore, been decided to have the work carried out departmentally after the rains of 1919.

100. Provision having been made in the Budget for 1918-19 for providing new pattern Water Entrances, the work of constructing 44 new pattern Water Entrances was carried out departmentally in B Ward in the Elphinstone Reclamation District.

101. The total certified expenditure upto the end of the year amounted to Rs. 13,031-10-9.

102. Owing to complaints from the residents in Thakurdwar Road regarding the stagnation of sullage water in the open side drains, a storm-water drain in Girgaum Road from New Wady to Thakurdwar Road was proposed. Tenders were invited for the work and the lowest tender of Messrs. Haji Ahmed Haji Sulleman & Co., amounting to Rs. 23,400, was accepted under the Standing Committee's Resolution No. 7254 of 22nd January 1919. The work was proceeding satisfactorily at the end of the year. The contract date for the completion of the work is 19th May 1919, but the work is expected to be completed earlier.

103. The total certified expenditure upto the end of the year amounted to Rs. 7,406-3-8.

104. To stop the breeding of mosquitoes in the ponds in the Victoria Gardens it was proposed to construct a storm water drain with a view to do away with the ponds. Tenders for the drain were invited and the lowest tender of Messrs. Krishnaji Chinoo and Sons, amounting to Rs. 18,190, was accepted under the Standing Committee's Resolution No. 6269 of 13th December 1918. The work was completed on 27th February 1919, the contract date for its completion being 8th March 1919.

105. The total certified expenditure upto the end of the year amounted to Rs. 17,460-4-7.

106. The work of laying a 9" pipe sewer from Messrs. Godrej and Boyce's Safe Factory to DeLisle Road sewer through and under the G. I. P. Railway lines and through the water course at DeLisle Road was completed departmentally in August 1918.

107. The total certified expenditure upto the end of the year amounted to Rs. 4,492-7-7.

108. The work of extending 9" pipe sewer in Worli Road was completed departmentally at a total cost of Rs. 4,671-10-4.

109. In connection with the work of the Harbour Branch Railway Extension, the work of providing cross drains with water entrances in five streets, namely Masjid Siding Road, Surat Street, Itola Street, Broach Street and Baroda Street, was completed departmentally during the year at the cost of the G. I P. Ry. Co.

110. The total certified expenditure upto the end of the year amounted to Rs. 6,782-4-0.

111. To bring certain premises at Khed Gully within 100 feet from the Municipal sewer, a 6" pipe drain with a vent shaft was laid departmentally in the passage near the Saitan Chowky at Khed Gully.

112. The total certified expenditure booked upto the end of the year amounted to Rs. 2,595-4-0.

113. In pursuance of action taken under Section 305, calling upon the owners of certain private streets to metal, pave, drain, etc., the same, the following works were completed :—

(*a*) A storm-water drain and a sewer in the passage off Fergusson Road, which work was entrusted to Messrs. J. L. Mehta & Co. who completed it on 6th May 1918.

(*b*) A 9" pipe sewer and a storm-water drain in the private street near the Meyer Sassoon Mills at Fergusson Road, which work was entrusted to the Annual Repair and Petty Works Contractors, Messrs. Ramji Keshevji & Co. who completed it during the year.

The total certified expenditure on (A) upto the end of the year amounted to Rs. 22,972-0-5 and that on (B) to Rs. 5,293-15-4.

114. To remedy the flooding in Victoria 3rd Cross Lane a covered storm-water drain in the lane was proposed. Tenders were invited and the lower tender of Messrs. Haji Ahmed Haji Sulleman & Co., amounting to Rs. 7,719-14-4, was accepted under the Standing Committee's Resolution No. 1196 of 15th May 1918. The work was completed on 4th July 1918 within the contract period.

115. The total certified expenditure upto the end of the year amounted to Rs. 5,851-0-9.

116. For the better disposal of storm waters in Alli Umer Street and in Masjid Street, it was proposed to construct half-sized water entrances in those streets. Tenders were invited for the work and the lower tender of Messrs. Haji Ahmed Haji Sulleman & Co., amounting to Rs. 10,550-0 5, was accepted under the Standing Committee's Resolution No. 1723 of 12th June 1918. The work was completed on 18th November 1918, the contract date for completion being 12th December 1918.

117. The total certified expenditure upto the end of the year amounted to Rs. 8,771-0-2.

118. To remedy the flooding in Dadyset Agiary Street between Kalbadevi Road and Cathedral Street and in Cavel, storm-water drains were proposed. Tenders were invited and the lower tender of Messrs. Pitha Fussa & Co., amounting to Rs. 14,624, was accepted under the Standing Committee's Resolution No. 2319 of 13th July 1918. The work was completed on 30th December 1918, two days after the expiry of the contract period.

119. The total certified expenditure upto the end of the year amounted to Rs. 13,801-7-10.

120. In order to do away with the open side drains in Khetwady 6th and 8th Lanes covered masonry storm-water drains were proposed. Tenders for the work were invited and the lower tender of Messrs. Haji Ahmed Haji Sulleman & Co., amounting to Rs. 11,574-13-3, was accepted under the Standing Committee's Resolution No. 1197 of 15th May 1918. The work was completed on 13th December 1918, the contract date for completion being 25th December 1918.

121. The total certified expenditure upto the end of the year amounted to Rs.11,559-6-3.

122. To remedy the flooding in Charni Road and part of Girgaum Back Road, a storm-water drain with water gullies and water tables was proposed. Tenders were invited and the lower tender of Mr. Haji Jusab Haji Valli Mahomed, amounting to Rs. 11,451, was accepted under the Standing Committee's Resolution No. 6265 of 13th December 1918. The work was completed on 13th March 1919, the date on which the contract period expired.

123. The total certified expenditure upto the end of the year amounted to Rs. 8,877-14-9.

124. For the better disposal of the sewage of the premises in Reay Road, north of Wari Bunder Road, a length of 735 feet of 9" pipe sewer was proposed to be laid in that road. It was also proposed to lay a 12" pipe storm-water drain along Hospital Lane to prevent flooding during rains. Tenders were invited for both these works and the lower tender of Mr. Haji Jusab Haji Valli Mahomed, amounting to Rs. 20,251, was accepted under the Standing Committee's Resolution No. 6266 of 13th December 1918. The works were completed on 22nd February 1919, the contract date for completion being 22nd March 1919.

125. The total certified expenditure up to the end of the year amounted to Rs. 13,754-10 6.

126. In order to drain certain premises in the passage to the east of Parel Tank Road the laying of a 9" pipe sewer was proposed. Tenders were twice invited but none were received. It has been decided to have the work carried out departmentally in October 1919.

127. The following works which were entrusted to the Petty Works Contractors, Messrs. Ramji Keshevji & Co., were completed during the year at the cost noted against them :—

	Name of work.	*Expenditure booked.* Rs. a. p.
1.	Extending 9" pipe sewer in the Ghorupdeo Cross Passage from the existing manhole in front of N. S. Depot for 300 ft. towards the east	2,155 0 10
2.	Covering with 1" W. I. plate the flushing chamber at the junction of Forjett Street and Tardeo Road	1,660 2 2

	Name of work.	*Expenditure booked.*
3.	Constructing S. W. drain with two manholes and a full-sized water entrance at Falkland Road Low Level-Road	Rs. a. p. 2,238 1 6
4.	Providing half-sized water entrances and 6 manholes in Lamington Road between Falkland and Foras Roads	2,969 11 5
5.	Providing S. W. drain with two full sized water entrances in Outram Road	2,238 1 6

128. The following works entrusted to the Petty Works Contractors, Messrs. Ramji Keshovji & Co., were in progress at the end of the year :—

1. Extending 9″ pipe sewer in Masjid Bunder Siding Road from Argyle Road to Clive 6th Row.
2. Providing 1′-6″ × 1′-6″ S. W. drain with half-sized water entrances and water tables in a portion of Mahomedan Street.
3. Affixing 9-24″ connections in place of 12″ connections to the main sewer at Worli near Pumping Station.

129. To remedy the flooding in Nepean Sea Road, a covered storm-water Drain with water entrances and manholes was proposed. The work is being carried out departmentally.

130. The total certified expenditure on this work upto the end of the year amounted to Rs. 2,001-8-10.

131. About 32 small drainage works were carried out departmentally and through the agency of the Petty Works Contractors out of the grant of Rs. 15,000 provided in the Budget for Petty Drainage New Works.

132. The total certified expenditure up to the end of the year amounted to Rs. 13,938-10-2.

Alterations of Drains.

133. A further amount of Rs. 5,000 was provided for the work of replacement of S. W. pipes in the Colaba Sectional District by cast-iron pipes in addition to the balance of Rs. 576-3-3 renewed from the last and previous years' grants. The work was taken in hand departmentally on 1st December 1918 and completed on 1st March 1919.

134. The total certified expenditure upto the end of the year amounted to Rs. 70,801-13-11, out of a total provision of Rs. 72,140-4-1 sanctioned upto date.

135. The work of renewing the 15″ cast iron sealed sewage main in Fergusson Road was completed during the year. A total length of 3,250 feet was renewed.

136. The total certified expenditure upto the end of the year amounted to Rs. 47,114-2-8.

Maintenance of Drains.

137. No damage of any kind was done either to the Sea Walls or to the Biological Installation in connection with the Malabar Hill Sectional Sewerage Works during the last rains.

138. The large storm-water drains in Reay Road, Connaught Road, Parel Road and Suparibag Road worked satisfactorily during the year.

139. There are about 120 miles of pipe sewers and the systematic cleaning of these sewers has been carried out throughout the fair season. Double discs and cleaning rods have been passed through 33·06 miles of these sewers and the silt removed therefrom amounted to 2,147 tons or 54,649 cubic feet.

140. There are 13·12 miles of Ovoid Main Sewers. About 11·75 miles of these sewers were scraped and 250 tons or 6,930 cubic feet of silt was removed therefrom.

141. There are 152 miles of S. W. drains, out of which 38·25 miles were cleaned and 11,918 tons or 303,385 cubic feet of silt was removed therefrom.

142. An extra grant of Rs. 10,000 for cleaning the storm-water drains and water courses was provided in the Budget and the work of cleaning the large S. W. drains and water courses at the following places was done:—

143. The main storm water drain in Falkland Road from Lamington Road to Khetwady Main Road and in Gilder Lane from Bellasis Bridge Pipe Depot to Lamington Road was cleaned at a total cost of Rs. 2,578-5-9.

144. Water courses were cleaned at Arthur Road, DeLisle Road, Sewri Road, Currey Road, Dharavi Road and Elphinstone Road at a total cost of Rs. 2,852-6-11.

145. The cleaning work could not be done to the full extent of the grant owing to the shortage of labour.

146. There are 30 catchpits on pipe sewers and 9 on main sewers, and the silt removed therefrom during the year amounted to 1,891 tons or 48,183 cubic feet.

147. There are 453 underground flushing chambers to flush pipe sewers and 685 vent shafts to ventilate the sewers.

148. The work of cleaning the open main drain at Worli was carried out departmentally at a total cost of Rs. 3,197-3-7 out of the grant of Rs. 3,200 provided for the purpose and the silt removed therefrom amounted to 43,730 cubic feet.

149. The expenditure on the maintenance and up-keep of the open main drain and the low-level channels amounted to Rs. 2,909-8-8 against the grant of Rs. 3,000.

150. It having been found necessary in the interest of sanitation to remove silt from the Low-Level Channels as early as possible and as it was not possible to do this work from the ordinary grants of the Drainage Department, the Corporation under their Resolution No. 5443 of 11th November 1918 sanctioned a grant of Rs. 30,000 from Surplus Cash Balance for the cleaning of the Channels. Tenders were invited for cleaning (A) the Low-Level Channel No. I from the junction of Haines Road and Junction Road to Fergusson Road and (B) the whole of channel No. II and the lowest tenders of Messrs. Baburao Dinaji & Co., amounting to Rs. 12,000 and 18,000 respectively for these works, were accepted under the Standing Committee's Resolution No. 8036 of 12th February 1919. The works are going on satisfactorily. The contract dates for the completion of the works are 24th June 1919 and 24th July 1919 respectively, but they are expected to be completed before the next rains.

151. The work of constructing relieving arches for strengthening the old main drain in Falkland Road was carried out departmentally and completed on 28th February 1919 upto the limit of the funds provided in the Budget for 1918-1919.

152. The total certified expenditure booked upto the end of the year amounted to Rs. 5,508-15-4.

153. A sum of Rs. 8,762 was provided for repairing the banks and sides of the Low-Level Channel No. I between Fergusson Road and Cart Track Bridges. The work was carried out during the year.

154. The total certified expenditure upto the end of the year amounted to Rs. 7,168-0-10.

Ejectors.

155. The new Ejectors at Nos. III, IV and V in the Colaba Sub-Districts worked satisfactorily.

Latrines, Urinals and Night Soil Depots.

156. The following works of latrines and urinals were carried out departmentally and through the agency of the Petty Works Contractors:—

Departmentally.

		Rs.	a.	p.
1.	Temporary latrines in the compound of Arthur Road Hospital	146	2	5
2.	Reconstructing the privy at the Haines Road Cemetery ...	169	14	4
3.	Six-seated trough pattern urinals in front of Market at Elphinstone Road	2,270	14	5
4.	Three-seated latrine at the Babula Tank Reclamation... ...	508	12	9
5.	Five-seated latrine at Annesley Road Health Camp	597	3	0

Through Petty Works Contractors.

1.	Three-seated urinal at the junction of Khoja Street and Bapty Road	374 7 9
2.	Trough pattern urinal of two compartments at Masjid Bridge Road	In progress.

157. The work of demolishing the existing six-seated latrine on water carriage system coming in the way of the Harbour Branch Ry. and reconstructing it at Masjid Siding Road was being carried out at the end of the year at the cost of the G. I. P. Ry. Co.

158. The total certified expenditure booked upto the end of the year amounted to Rs. 1,394-5-6.

159. A Hopper with a screen around it at the Worly N. S. Depot was constructed by Messrs. Ramji Keshevji & Co. at a total cost of Rs. 2,539-8-3.

Street and House Connections.

160. The street portions of the house drainage connection works in the City were carried out departmentally. During the year 289 sullage connections were made at a total cost of Rs. 17,513-6-9. These connections serve 256 premises, of which 234 are drained on the closed system and 22 on the open drainage system.

161. In addition to the above, 122 storm-water connections were made at a total cost of Rs. 4,276-9-8.

162. Several branch drains were laid for bringing certain undrained premises within 100 feet of the Municipal sewers as required by Section 231 of the Municipal Act.

163. About 80 estimates and 400 plans were prepared for the issue of Notices under Sections 222, 230 and 238 of the Municipal Act.

Miscellaneous.

164. Works to the extent of about Rs. 1,64,165 including repairs, alterations and cleaning of sewers and drains generally and making minor additions thereto and the drainage arrangements of the various Health Camps, etc., as also all new drainage works provided for in the Budget for 1918-1919 were carried out during the year. Out of these, works costing Rs. 89,775 were carried out departmentally and the rest were executed through the agency of the Petty Works Contractors.

165. 14 manhole frames and covers over storm-water drains were provided at the total certified expenditure of Rs. 2,111-4-1 during the year.

166. A new type of improved concrete covers for water entrances was introduced four years ago and it has proved satisfactory for the effectual closing of these entrances during the fair season and thus preventing the breeding of mosquitoes. The total number of such covers fixed during the year under report is as under, the cost having been met out of the Miscellaneous Grant;—

A	Ward	Nos. 951
B	„	„ 112
C	„	„ 204
D	„	„ 156
E	„	„ 133
F	„	„ 34
G	„	„ 101
		1,691

MECHANICAL BRANCH.

Municipal Workshops.

1918-19.

167. The total expenditure incurred during the year for works executed at the Municipal Workshops aggregated Rs. 3,81,569-1-4 as under :—

	Rs. a. p.	Rs. a. p.	Rs. a. p.
For Departmental Works—			
Labour	1,29,484 1 6		
Stores	1,88,079 12 4		
Piece-work, cart-hire, &c.	1,933 6 9		
		3,19,497 4 7	
For Brass Castings manufactured in the Shop—			
Labour	1,898 12 4		
Stores	6,347 15 4		
		8,246 11 8	
For Iron castings manufactured in the Shop—			
Labour	759 5 9		
Stores	1,003 9 9		
		1,762 15 6	
			3,29,506 15 9
For Establishment, &c., Charges,—			
(a) Shop—			
Labour	8,991 5 9		
Stores	22,884 0 4		
Piece-work, contingencies, &c.	85 0 0		
		31,960 6 1	
(b) Office—			
Establishment	18,352 12 2		
Repairs to buildings	31 3 7		
Rent paid to Government	0 0 0		
Contingencies	1,717 11 9		
		20,101 11 6	
Total Establishment, &c., charges			52,062 1 7
Total Expenditure during 1918-19			3,81,569 1 4

168. The total amount of bills preferred by the workshops during the year 1918-19 aggregated Rs. 4,07,262-5-9 as under :—

	Rs. a. p.	Rs. a. p.
Expenditure on Departmental Works	3,19,497 4 7	
Do „ brass castings	8,246 11 8	
Do. „ iron castings	1,762 15 6	
		3,29,506 15 9
Supervision, &c., charges		78,737 7 10
Amount chargeable on different jobs during the year		4,08,244 7 7
Add—Amount of incomplete jobs at the beginning of the year 1918-19		6,240 5 9
		4,14,484 13 4
Deduct—Amount of incomplete jobs at the end of the year 1918-19		7,222 7 7
Total amount of bills preferred by the Workshops during the year 1918-19		4,07,262 5 9

169. The working of the shops resulted in a profit of Rs. 26,743-3-3 as under :—

	Rs. a. p.	Rs. a. p.
The actual charges are as follows :—		
(a) General working of the shops (establishment, &c., charges)	52,062 1 7	
(b) Construction and erection of a cupola for iron castings	550 0 0	
Amount of supervision, &c., charges by charging fixed percentage of 25 per cent. on the cost of works executed at the shops		78,126 14 11
Profit on account of hire of pumping plant, &c., to private parties and for departmental purposes		610 8 11
Amount realized by sale of waste paper, &c.		17 13 0
Credit for the value of air Compressor plant transferred to the Water Works Department		600 0 0
Net Profit in the working of the shops	26,743 3 3	
Total ... Rs.	79,355 4 10	79,355 4 10

Statement No. 1.

170. The principal "Items of Works" commenced and also completed during this year :—

	Rs.
Improving the Northbrook Gardens, providing swings, parallel bars, vertical bars and shifting the bust of Lord Northbrook...	1,050
Constructing four meat vans for the Market Department.	6,639
Converting the bodies of Thorny Croft Motor Nos. 118 and 120 of the Road Department	998
Making two Dead Body Hand Carts for the Commissioner of Police...	744
Supplying three dozen feeding troughs	423
Making 27 cabinets for different departments of the Municipality for card indexing	1,277
Making a new 6 ft. dia. Penstock for low level Out-fall sewer at Love Grove	3,326
Making a cupola for the foundry	550
Dismantling corrugated iron sheds at Pawai Engine House and erecting them at Bandra	5,996
Making a screen at Colaba Kutchra Siding	3,591
Providing stalls for the Municipal Grain Shop at Kamatipura...	620
Making two cabinets for keeping new City Survey plans.	621
Overhauling and putting in order the Tar Mixer at Nowroji Hill.	779
Repairing E Ward Stables	534
Making 40 cupboards for Acworth Leper Asylum.	877
Supplying iron drain carts to Bandra Slaughter Houses.	1,400
Providing Grain Shops at different places	2,984
Repairing and providing cots, etc, at Maratha (Plague) Hospital.	444
Supplying Jungle Wood Fish Benches	1,547
Supplying Deal wood boxes, planks with stables, locks and duplicate keys, &c., at Arthur Road Hospital	682
Constructing the compartments in the Game Birds enclosure at the Victoria Gardens	1,022
Erecting Mandaps for General Election and making arrangements for Justices election and repairing polling boxes	5,387
Painting and repairing 75 flag poles and painting and repairing 50 flag shields	786
Repairing, caning and painting wooden cots, &c., at Arthur Road Hospital	610
Providing a barbed wire fencing at the Haines Road Cemetery	2 000

Statement No. 2.

171. Works commenced in the previous year and completed during this year :—

	Rs.
Converting N. P. hydrants into H. P. hydrants	8,153
Repairing the Tar Storage Tank at the Gas Works, Parel	645
Reconstructing and improving the Stone-Crushing Machine at Sewree	3 350
Repairing the doors of the Erskine Road Market	766
Supplying five flexible stand pipes with couplings, canvas hose, &c.	515
Repairing wheels from the Drainage Department	427
Making valve faces out of raw material for Love Grove Pumping Station	977

Statement No. 3.

172. The principal "Items" of new works which were in progress but were not completed before the close of the year.—

	Rs.
Erecting the new Stone Crusher at Nowroji Hill	3,273
Converting Municipal Commissioner's Record Room into office accommodation	5,363
Removing Gates from Worlee and bringing them down to the Municipal Workshops for constructing storm-water Sluice Gates at Worlee	770
Making a ramp at Tardeo Flats Reclamation	841
Making C. I. benches and fixing them on site for Malabar Hill Hanging Gardens	509

173. In addition to the abovementioned works the Workshops have continued to keep in repair the rolling stock of the various departments, the machinery of the Love Grove Pumping and Compressor Stations, the Colaba Compressor Station, machinery of the Love Grove Outfall Works, all Ejector Stations, steam rollers, stone crushing and tar mixing plants both at Nowroji Hill and Sewree Depôts, fire engines, motor refuse wagons, and inspection motor cars together with the motor and bullock drawn meat vans belonging to the Market Department.

174. During the year the amount of work turned out from the shops has increased very considerably. This necessitated the applications to the Standing Committee and the Corporation for supplementary grants as under :—

Authority.	Sub-head of grant.	Amount.	Source of funds.
		Rs	
Corporation Resolution Nos. 3956 of 12th September 1918 and 5444 of 11th November 1918.	Stores	1,50,000	From Surplus Cash Balance.
Corporation Resolution Nos. 3956 of 12th September 1918, 7378 of 23rd January 1919 and 9617 of 20th March 1919.	Extra and Overtime Labour.	40,900	35,000 from Surplus Cash Balance and 5,900 by transfer of funds.
Corporation Resolution No. 8965 of 6th March 1919.	Office Establishment.	950	By transfer of funds.
Standing Committee Resolution No. 4419 of 2nd October 1918.	Printing	400	Do. do.
Standing Committee Resolution No. 9731 of 26th March 1919.	Clothing	57	Do. do.
Standing Committee Resolution Nos. 4597 of 9th October 1918 and 8819 of 5th March 1919.	Books and Dead Stock.	87½	Do. do.

175. The following comparative statement shows the Turn-over and Profit during the last three years :—

	1916-17.	1917-18.	1918-19.
Turn-over	2,38,023	2,82,959	3,81,569
Profit	8,640	12,238	26,743

176. The workshops are not yet completed owing to our inability to purchase certain machinery due to war. As, during the previous year, it was impossible to obtain spares from England, a considerable amount of extra work was involved by manufacturing these spares in the Workshops.

177. During the year a Cupola was constructed at a cost of Rs. 550. This has assisted our work considerably and allows us to manufacture sufficient castings to meet our normal demands.

PUMPING AND AIR COMPRESSOR STATIONS.

Love Grove Pumping Station.

178. The beam engine in No. 2 Pumping Station worked satisfactorily during the year.

179. A good deal of trouble has been experienced in the pumps owing to the acidity of the sewage which has attacked the metal of the frames.

180. The new plunger chamber for No. 2 pump has been received from the Makers and fitted in place.

181. The large air vessel and the connections arrived during the year and have been installed.

182. During the year the old high outfall has been walled up and all sewage discharged through the new outfall. It was found necessary to assist the pumps in the New Pumping Station by bringing into use the old Worthington Pumps for an aggregate period of 3,8_8 hours.

183. The combined number of revolutions of all engines in No. 1 station was 3,822,749 and in No. 2—27,817,900.

184. Rubber valve faces of a satisfactory quality are now being manufactured in India. These valve faces have assisted greatly in increasing the efficiency of the pumps.

185. No trouble has been experienced with the boilers which have all been surveyed and are ready for the monsoon.

186. The coal received during the year was of a very poor quality. The following statement shows a total quantity of coal consumed during the year together with the average cost per ton of different coa's :—

Description.	Tons.	Average rate per ton.
1st class Jharia coal	4,926-9-0-0	Rs. 18-14-9
Coal obtained from Dy. Coal Controller	200-0-0-0	„ 23-0-0
Bhalgora steam coal	186-5-0-0	„ 19-14-9
Ghansadih do.	46-16-0-0	„ 18-3-9
Total Tons ...	5,359-10-0 0	

187. The average cost per ton of coal was Rs. 19-0-10·22 against Rs. 19-8-1 in the previous year whilst the daily consumption was 14 tons 13 cwts. 2·69 qrs. against 15 tons 16 cwts. 2·18 qrs. in 1917-18.

188. Trouble was again experienced in obtaining regular deliveries of coal whilst rubble coal suitable for the mechanical stokers was unobtainable.

189. During the year 5,580 tons of detritus have been recovered from the screening chamber, a maximum of 315 tons being recovered in one week.

190. A great deal of sickness prevailed amongst the labourers to overcome which a dispensary was started in the Love Grove Compound. A medical man from the Health Department attends three times in a week and gives free medicine and advice.

191. Owing to the war no progress was made with the following sanctioned works :—

1. Extension of the bucket and band conveyors.
2. Removal and reconstruction of retaining wall.

192. Mr. Jordan continues as Acting 1st Engineer.

Love Grove Compressor Station.

193. The air compressing machinery worked satisfactorily during the year.

194. Of recent years the amount of sewage to be pumped by the Shone System has steadily increased with a result that the Compressor Engines had frequently to run for weeks without stopping. This increased running has resulted in two cranksharts breaking through fatigue. The necessary repairs have been carried out and the machinery is again in good running order.

195. The total consumption of coal at the station was as follows :—

Description of coal.	Quantity. Tons.	Rate per ton.
Jharia coal, 1st class	3,761-11-3-21	Rs. 18-14-9
Controller's coal	200-0-0-0	„ 23-0-0
Bhalgora steam coal	186-5-0-0	„ 19-14-9
Ghansadih do.	46-16-0-0	„ 18-3-9
Total ...	4,194-12-3-21	

196. The average cost per ton comes to Rs. 19-1-11·89 against Rs. 19-10-4·48 in the previous year, whilst the daily consumption was 11 tons 9 cwts. 3·37 qrs. against 12 tons 7 cwts. 2·11 qrs. in 1917 18.

197. The combined number of revolutions run by Nos. 1 and 2 (large) air compressors was 35,784,105 whilst the revolutions of Nos. 3 and 4 (small) air compressors amounted to 47,364,943 against 37,430,953 and 57,491,734 respectively for the previous year.

198. During the year extreme difficulty was experienced in obtaining coal and the supplies received were of an extremely low calorific value and contained a very high percentage of ash. As there is no surplus of boiler power at the compressor station it was with great difficulty that a sufficient head of steam was maintained.

199. Owing to the Influenza epidemic and other causes the supply of labour was below our requirements.

Colaba Air Compressor Station.

200. During the year the machinery ran satisfactorily, the only mishap being the breakage on a crankshaft due to an old flaw.

201. This breakage threw an extra load on the electric motor, causing the armature to short-circuit. The damage has been repaired.

202. The steam plant at Colaba was in use for some time and consumed 439 tons 5 cwts. of coal. The electric motors consumed 276,210 units and the total incurred amounted to Rs. 26,040 against Rs. 24,520 in 1917-18.

203. The revolutions of the compressor engines were as follows :—

No. A	Compressor	Engine	... ...	24,868,223
„ B	„	„	... ...	16,680,308
„ C	„	„	... ...	14,170,920

204. The total revolutions were 55,719,451 against 61,865,532 in 1917-18.

205. The ejectors worked from this station did not give much trouble.

206. The total quantity of sewage pumped from this station is as follows :—

Ejector No. 1	Colaba		190,398,500	gallons.
„ „ 2	„		149,006,000	„
„ „ 3	„		160,429,000	„
„ „ 4	„		71,952,500	„
„ „ 5	„		16,656,750	„
		Total gallons ...	588,442,750	

Storm-water Sluices.

207. The storm-water sluices at Love Grove and Worli have been maintained in good condition.

208. Owing to the combined influences of the atmosphere and sea water the chains and other iron work get rapidly corroded and it has practically necessitated replacements of all such parts during this year. Signs of decay are shewing up in the wood work of the sluice gates and extensive repairs will have to be undertaken at an early date.

209. There was no flooding in the vicinity of the Worli Storm-Water Channel during the monsoon.

Ejectors.

210. The ejectors have not given much trouble though many of them are now very old, and numerous working parts have to be renewed.

211. Club Road ejector has abolished and sewage from this district is carried away by gravity sewers. A connection has been made which has relieved the Arthur Road ejector which was overworked, the sewage being diverted to the Chinchpokli ejector.

212. The following list shows the amount of sewage pumped by the ejectors during 1918-19 :—

	Ejector Station.	Quantity of Sewage pumped in Gallons.
1	@ Ferguson Road ..	310,463,000
2	@ Arthur Road ...	410,608,000
3	@ Elphinstone Road	188,023,000
4	@ Chinchpokli ...	531,264,400
5	@ Sewri New Road	17,080,000
6	@ Church Street ...	182,910,000
7	@ Tank Bunder ...	130,482,000
8	@ Club Road ...	Closed
9	@ Wylie Road ...	49,650,300
10	@ Nepean Sea Road	32,862,000
11	@ Warden Road ...	53,680,000
12	@ Gamdevi Road ...	48,628,000
13	@ Princess Dock ...	19,848,000

Inspection Motor Cars.

213. The total mileage covered by the Municipal Inspection Motor Cars during the year was 31,925 miles. This shows an increase of 2,725 miles above the total of the previous year.

214. The cost of maintaining the cars inclusive of establishment and all other charges amounted to Rs. 10,208-4-3.

215. The average cost works out at 5·11 annas per mile against 5·14 annas in the previous year.

216. Owing to increase in prices of Petrol stores, &c., it was found necessary to apply for a supplementary grant of Rs. 900, *vide* Standing Committee Resolution No. 9300 of 13th March 1919.

217. The Municipal Inspection Motor Cars are in fair condition. Some of the cars are now about 8 years old.

Inspection of Factories and Workshops.

218. A more complete inspection of small workshops and factories coming within the purview of the Municipal Act was carried out during the 2nd half of this year. During this period the following applications for permits were received :—

		Nos.
A	Ward	9
B	„	6
C	„	20
D	„	21
E	„	42
F	„	16
G	„	30
	Total ...	144

219. Also applications were received in 42 cases for casting metals, 15 for Blacksmith shops, and 4 for smeltries.

220. Owing to the scarcity of suitable premises many of the above mentioned factories have been established in bungalows formerly used as habitations.

221. A very noticeable feature is the installation of up-to-date well conducted flour grinding mills and also improvements in the existing factories where the owners have, in most cases, readily complied with our suggestions making the factories safe to work in and quite sanitary.

222. It will be noticed that most of the new industries have been commenced in E Ward which is already in a congested state. Many permits have had to be renewed to prevent hardships and the industries will have to be tolerated until suitable accommodation is available in the north of the Island.

ROADS.

Construction of New Roads.

Sewri Cemetery Road.

223. The work of improving the levels and gradients of this road and removing the hill was in progress. A portion of the hill about 455 feet was previously cut down and a further 300 feet was given to Mr. Keshav Gangadhar for excavating and supplying stones to the Municipality. As the Contractor failed to complete the work within the stipulated time—he having supplied 1,609 brass of stones only out of 2,700 brass—further quotations are being invited to complete the remaining work given to him and also to excavate a further length of 581 feet.

Masjid Bunder Road.

224. Lowering of this road was practically completed at the end of the year. The expenditure booked to date was Rs. 35,522-1-11 against a provision of Rs. 45,000 made in the Budget. The work involved a lot of rock cutting which had to be done with great care by chiseling as blasting could not be safely done in this populated locality. It also involved the shifting of all underground works such as drains, gas and water mains and services, electric and telephone mains and services, etc.

Cadell Road.

225. The work of constructing a new straight road from the junction of Old Prabhadevi Road and the proposed Foras Road to join the widened Mahim Bazar Road was commenced, trees were cut down and road excavated to a length of 1,400 feet. Some 1,000 feet were also rubble packed. Cost tabulated was Rs. 5,474-15-6.

Quarrying of Nowroji Hill.

226. Quarrying work at Nowroji Hill was done throughout the year through the agency of contractor Mr. W. M. Deodhar who supplied during the period 2,075 brass of rubble stones, &c., to the Municipality. Endeavours are being made to complete the work in time and to obtain greater output of materials. Out of the above quantity 1,334 brass were crushed into——metal 1″ and ½″ chips and powder which were all fully taken advantage of in making tarred roads and recoating the existing ones. The chips which form excellent binding material for ordinary water bound roads were also used in sealing the surface thereof.

New Roads taken over from Public Bodies and declared public.

227. The following roads were taken over and declared public:—

	Name of the road.	*From whom taken over.*	*Area.* sq. ft.
1.	Tank Pakhadi Street.	City Improvement Trust	24,262
2.	Milk Street ...	Do.	7,279
3.	Water Street ...	Do.	7,798
4.	Windsor Street ...	Do.	28,626
5.	Hospital Avenue ...	Do.	27,837
		Total ...	95,802

Widening of Important Roads.

228. *Nesbit Road*—This work except through Mangalwadi was completed at a total cost of Rs. 1,97,445-5-2 against the grant of Rs. 2,45,000. The work of extending the road through Mangalwadi will be shortly taken in hand.

229. *Worli Road.*—Some 1,100 feet of road 36' wide was completed and 12 feet width of footpath laid on both sides. A further 1,000 feet × 18 feet wide was also made and a footpath laid on one side ——and 1,500 feet of length 18 feet wide was tarred. The total expenditure booked was Rs. 1,45,809-1-9 against Rs. 1,78,000 sanctioned.

230. Street widenings consequent on the acquisition of set-backs were as follows :—

	Sq. yds.
Bora Bazar Street	9
Marine Lines	5
Cawasji Patel Street	10
Do.	3
Carnac Road Junction, Frere Road	200
Masjid Bundar Road	29
Mazagon Junction and Chinchbunder	40
Samuel Street	2
Dungri Street	22
Samuel Street	18
Abdul Rehman Street	14
Do.	24
Do.	8
Nakhoda Street	11
Samuel Street (Bhandari)	8
Sarang Street	17
Dungri Street Junction	1
New Hanuman Lane	34
Vanka Moholla	13
Sutar Chawl	15
1st Bhoiwada	5
Kumbharwada	4
Panjrapole Junction, Bapu Khote	12
Girgaon Road	9
Kalbadevi	27
Girgaum Road	107
,, Back Road	20
Tardeo Road	373
Nepean Sea Road	240
Girgaum Road	42
Do.	59
Mugbhat Cross Lane	3
Tardeo Road	70
Sukhlaji Street	77
Duncan Road	7
Mahim Bazar Road	44
Do.	85
Do.	12
Do.	93
Lady Jamsetji Road	78

Levelling and Metalling, &c., Private Streets during the year 1918—1919.

231. Owing to the necessity of improving the private streets of the city, a special staff was engaged from the 1st of July to take action under Sections 305 and 377 (1 a) of the Municipal Act, and to look after the work of constructing private streets under Section 305 by the owners in their new premises.

232. *Private streets completed, the proportionate amount of which is being recovered.*

(1) Dady Santoke Lane.
(2) Sorabji Santoke Lane.
(3) Parel Road Cross Lane.
(4) Mugbhat Cross Lane.
(5) Passage leading to Mayor Sassoon Mills now called Planet Street.

233. *Private streets declared public under Section* 306.

(1) Private street off Slater Road.
(2) Do. leading to Mayor Sassoon Mills now called Planet Street.
(3) Do. off Charni Road opposite Railway Hotel.
(4) Do. off Foras Road known as Uranwala.
(5) Do. off Mugbhat Cross Lane.

234. *Private streets in which the work is under progress (under Section* 305.).

(1) Zaoba's Oart Road No. 1.
(2) Do. do. „ 2.
(3) Do. do. „ 3.
(4) Do. passage „ 3.
(5) Do. do. „ 4.
(6) Do. do. „ 5.
(7) Do. do. „ 6.
(8) Do. do. „ 7.
(9) Do. do. „ 8.
(10) Fergusson Road, north Cross Lane.

235. *Private streets where action under Section* 377 (1*a*)* *has been taken.*

(1) Laxminarayen Road.
(2) Vatchhraj Street.
(3) Mogul Gully.

236. *Private streets in which the work is being done by the house-owners under Section* 303 *and inspected by this Department.*

(1) Street off Forjett Street belonging to Mr. Raghoji.
(2) Street off Gowalia Tank Road.
(3) Street off Nepean Sea Road belonging to Mr. Darabsha Dubash.
(4) Street off Pedder Road belonging to Sir Dorab Tata.
(5) Street No. 3 off Sankli Street belonging to Mr. J. R. Patel.
(6) Street off Lamington Road.

237. *Private streets where action under Section* 305 *has been taken.*

(1) Burrows Lane.
(2) Karelwadi.
(3) Akalkote Lanes Nos. 1, 2 and 3.
(4) Kale Wadi.
(5) Street off Tardeo Road.
(6) Street between Sandhurst Road and Girgaon Back Road.
(7) Street off Balaram Street and Foras Road.
(8) Streets Nos. 1, 2, and 4 off Sankli Street.
(9) Chinchpokli Cross Lane.
(10) Mahomedan Street.

(11) Ghelabhai Street No. 1.
(12) Do. ,, 2.
(13) Do. ,, 3.
(14) Wanzawadi between Mahim Bazar Cross Road and Lady Jamsetji Road.
(15) Fergusson Road, south Cross Lane (between Fergusson Road and Sun Mill Lane).

238. The systematic improvement of private streets and lanes has already had a marked effect on the cleanliness of the areas dealt with and has added greatly to the comfort and convenience of the residents in many districts formerly uncared for.

Road Repairs.

239. The following is a statement of expenditure incurred on the repairs and maintenance of roads:—

		Rs.	a.	p.
1.	Full metalling (27,11,679 sq. ft.)	3,02,463	14	6
2.	Full patching (10,30,389 sq. ft)	54,836	14	7
3.	Patching (small) including value of the balance of materials on site and miscellaneous works (52,62,925 sq. ft.)	1,30,838	14	10
4.	Scraping and brushing	71,067	9	7
5.	Repairs and maintenance of footpaths, bridges, culverts and road-side retaining walls	13,985	12	11
6.	Maintenance and fencing of road-side trees	14,471	3	0
7.	General repairs to tools, plants, &c.	69,519	1	1
	Total ... Rs.	6,57,183	6	6

240. During the year changes were made in the working of the Road Department by placing it under the charge of a Deputy Engineer for Roads with an Assistant Engineer and a Road Superintendent under him, the former looking after the southern division comprising A, B, C and D Wards and the latter the northern division comprising E, F and G Wards. 5 Overseers and 31 Sub-overseers were employed out of the sanctioned strength of 5 and 39 respectively.

241. The supply of materials during the year especially metal, rubble and sand was ample but the supply of labour owing to the various epidemics that occurred was subject to great fluctuations being at times very low, while the supply of bullock and other transport was most unsatisfactory.

242. Despite these latter and the lack of sufficient heavy rollers very considerable progress has been made and substantial improvement effected.

243. The question of establishing adequate depots for the storage of materials is still under consideration.

244. The rate for full metalling worked out to Rs. 11-2-6 per 100 square feet or anna one and pies nine per square foot against the rates of Rs. 6-9-2 per 100 square feet and anna one per square foot respectively of the last year.

245. When comparing the rates the following data should be taken into consideration;—

	1917-18.	1918-19.
Depth of metal taking same over whole area	1·1 In.	2·64 In.
Cost for full-metalling per 100 s. ft. ..	Rs. 6 9 2	Rs. 11 2 6
Cost when considered in proportion to depth of material used	,, 6 9 2	,, 4 10 5
Cost of material per 100 c. ft. ...	,, 9 7 9	,, 20 0 0 (average)
,, ,, labour	,, 0 9 0 per day.	,, 0 9 0 per day
		+3 8 0 War allowance per month.
,, ,, bullock cart	,, 1 12 0 each.	,, 3 0 0

246. It will thus be seen that though at first sight the cost per unit area during 1918-19 appears greater than that for 1917-18, when the additional cost of labour, bullock carts and metal as shown above are considered and that with reference to the greatly increased depth of the latter used on the average 2½ times that used in 1917-18 it will be realised that the relative cost per unit area of road covered was actually much less and as so much more material was put into the repairs in 1918-19, the work done is of a much more substantial nature, which coupled with the relatively less cost is a very distinct and gratifying improvement.

247. Several miles of roads have been brought to a proper camber and are ready to receive a finishing coat of tarred material. Every endeavour will be made to obtain sufficient tar and appliances to admit of this work being carried out during next dry season.

Road Foundations.

248. From the grant of Rs. 50,000 provided in the budget for 1918-19 the portions of the following roads were provided with rubble bottoming:—

	Area in sq. ft.
Girgaon Road	9,152
Duncan Road	14,750
Girgaon Road	15,600
Charni Road	2,505
Clerk Road	3,000
DeLisle Road	54,000 (In progress.)
Do.	35,480
New Parbhadevi Road	20,810

249. The work of providing cement concrete bottoming on a portion of Frere Road was in progress.

250. The total expenditure amounted to Rs. 32,012-0-3.

Road Excavation.

251. The following lengths of roads were opened by various agencies :—

	R. ft.
Water Department	45,999
Drainage Department...	60,078
Bombay Electric Supply & Tramways Co., Ld.	35,526
Callender's Cable and Construction Co. (for Tata Hydro-Electric Power Supply Co.)	4,558
Bombay Telephone Co.	615
Bombay Gas Company	23,039
Total Rg. ft. ...	169,815

252. This represents about 32 miles of the total of about 171 miles of roads in the City

253. The cost of repairing these excavations, including private street works, amounted to Rs. 2,59,998-7-9.

254. Advantage is taken of road excavations wherever widths permit to repair the whole width of the road side by side while restoring the excavated surface.

Road Watering.

255. The grant of road watering was increased from Rs. 96,500 to Rs. 1,00,000 for this year, but owing to the rise in prices of material and labour, and scanty rain, it had to be supplemented by Rs. 56,000 by Corporation Resolution No. 6499 of 19th December 1918.

256. The total expenditure amounted to Rs. 1,39,873-15-3.

257. No hydrants were fixed during the year on account of difficulty of obtaining castings due to the war.

258. Consideration for providing interchangeable bodies, for watering purposes, to road motor lorries had to be deferred on account of insufficient number of road lorries.

Road Materials, Appliances, &c.

259. The total quantity of road materials purchased during the year and their cost were as follows:—

Description of materials.	Quantity in C. ft.	Cost.	Remarks.
		Rs. a. p.	
From Municipal Contractors—			
Metal	1,513,247	3,01,682 0 6	
Sand	253,661	36,107 0 10	
Rubble stone	207,549	8,042 8 3	At Rs. 3-14 per 100 c. ft. from Mr. W. M. Deodhar from Municipal quarry at Nowroji Hill.
Do.	60,747	1,974 4 5	At Rs. 3-4+25% per 100 c.ft. from Mr. Keshav Gangadhar from Municipal quarry at Sewri Cemetery Road.
Red hill earth	790	142 3 2	

260. No materials were purchased from the City Improvement Trust during the year, as Municipal quarries at Sewri and Nowroji Hill, supplemented by 192,349 c.ft. from Lovegrove Outfall Works, supplied all requirements.

261. The comparative rates per 100 cubic feet of materials for the year 1917-18 and 1918-19 were as follows:—

Description of materials.	Rate paid in 1917-18.	Rate paid in 1918-19.	Remarks.
	Rs. a. p.	Rs. a. p.	
Municipal Contractors—			
Metal	9 7 9	21 0 0	For A, B, C, and D Wards.
Do	9 7 9	19 0 0	For E, F, and G Wards.
Sand	8 14 6	14 3 9*	
Sand stone	7 15 0	.....	No contract this year.
Rubble stone	8 12 6	.....	Do.
Red hill earth	12 0 0 (21 per cent above)	18 0 0	

* Does not include cartage.

262. One British Berna lorry of 5-ton capacity was purchased from Mr. H. N. Choksey at a cost of Rs. 16,000.

Dust Preventive Measures.

263. 6 roads with an aggregate area of 116,050 square feet were painted with tar in 1 coat. 52 roads comprising an area of about 1,891,396 square feet were painted in 2 coats, the first mixed with ½" chips and the second with metal grit.

264. Tarring operations were extended as far as Materials and appliances admitted, 8 roads, *viz.*, Tardeo Road, Hughes Road, Lady Jamsetjee Road, Mahim Cross Road, Lovegrove Road, Worlee Road, Medows Street and Cross Lanes and Agra Road with an area of 476,422 square feet were newly tarred.

265. The cost of tarring operations amounted to Rs. 1,47,308-15-6 inclusive of Rs. 62,302-8-0 and Rs. 8,046-4-6 being the price of tar purchased from the Bombay Gas Company and Messrs. Shaw Wallace & Company respectively.

266. Rs. 911-7-6 only was spent during the year for purchasing wooden blocks from the Conservator of Forests for payment on Frere Road against the grant of Rs. 50,000. Further purchases could not be made owing to inability on the part of the Conservator of Forests to supply the blocks properly cut through lack of suitable machinery.

267. The wood block paving laid in Frere Road over three years ago is still in excellent condition.

Tree planting.

268. New trees were planted on Queen's Road, Frere Road, Argyle Road, Wari Bunder, Warden Road, Moreland Road, Jacob's Circle, Haines Road, Arthur Road, Connaught Road, Sussex Road, Reay Road, Cadell Road and other roads.

269. The number of trees planted was 488 and the certified expenditure on the works amounted to Rs. 556-14-3.

270. No new tree guards were purchased during the year on account of the high price of material.

Hanging Gardens at Malabar Hill.

271. These gardens have been extended further towards the Tulsi Pipe Line and the general outlines of the paths have been laid out. The gardens have become a source of attraction and large numbers resort to them in the mornings and evenings.

Conversion of Falkland Road Garden into a Play-ground.

272. Work of filling in, levelling, forming tarred footpaths and providing benches &c., was completed. Expenditure booked to date was Rs. 1,706-7-4 against the grant of Rs. 4,036.

Conversion of Northbrook Gardens into a Play-ground.

273. The filling in, and forming of tarred roads and paths, and providing single and double bars, &c., was completed at a cost of Rs. 2,864-5-0. The grant sanctioned for the work is Rs. 12,700.

Street Refuges and Tramway Shelters.

274. Street refuges were constructed and provided with gas lamps during the year at the places mentioned below :—

	No. of refuges.
Dhobi Talao	1
Esplanade Road	1
Hornby Road	1
Sandhurst Road	4
Girgaum Road	2
Gowalia Tank Road	7
Total	16

275. Three tram shelters were erected during the year, one at Crawford Market and two at Dhobi Talao.

FOOTPATHS.

Footpaths Paved.

276. From the budget provision of Rs. 30,000 portions of footpaths along the following roads were taken up for paving with 3" Shahabad stone slabs :—

	s. ft
Mayo Road	9,303
Esplanade Road	11,835
Mint Road	1,596
Frere Road	3,300
Abdul Rehman Street	4,147
Girgaon Road	16,000
Balaram Street.	5,437

277. The work was given to Messrs. Sitaram Laxman & Sons and was completed before the close of the year. Besides this the contract was also given to Mr. Anna Balwant for paving footpaths at various other places which work was in progress at the close of the year.

278. The work of paving footpaths at Musjid Bunder Road was carried out departmentally at a cost of Rs. 4,823-1-5. The work was in progress at the close of the year.

279. Several footpaths were put in good order and spread over with clinkers.

Footpaths Formed.

280. Footpaths were newly formed at the following places, the expenditure being met from the Budget provision for repairs and maintenance of roads and footpaths :—

	Area in sq. ft.
Bastion Road	1,920
Mumbadevi Road	3,170
Dadyset Agiary Street	1,225
Fanaswadi	475
Kumbharwada	174
Girgaon Road	11,437
Tardeo Road	8,112
Mahim Custom Road	2,210

281. Footpaths were also formed at the following places in the process of adding setbacks to roads :—

	Area in sq. ft.
Vanka Mohella	190
New Hanuman Lane	496
Tardeo Road	7,200
Girgaon Road	1,125
Nesbit Road...	52,800
Mahim Bazar Road	780
Portuguese Church (north)	8,280
Do. do. (south)	6,000

TRAMWAYS.

282. A new double tram track along Girgaon Road between Charni Road and Lamington Road about 900 feet in length was laid during the year.

283. A length of about 3,012 feet of single track loop lines were laid at Rampart Row, Tardeo Tram Terminus and Soparibag Road.

284. The Corporation under their Resolution No. 4313 of 7th October 1915 requested the Commissioner to include in the Annual Report of the Municipality the number of tram cars running in the City classified according to the different types approved by the Corporation with the total carrying capacity of each car. The following information, obtained from the Bombay Electric Supply and Tramways Co., is given for the year under report :—

50 bogie cars, each carrying 52 passengers sitting and in addition 8 standing during rush hours.

50 bogie cars carrying 44 passengers sitting and 20 standing.

49 single truck cars, each carrying 32 passengers.

1 „ „ „ 36 „

30 trams carrying 70 passengers.

41 „ „ 78 „

PUBLIC LIGHTING.

Gas Lighting.

285. The total number of gas (burners) reported last year was 6,687, of these 9 were transferred to the Garden Department and 82 removed. The balance of 6,596 burners were increased by 96 burners during the year, making a total of 6,692 as detailed in the following statement:—

Wards.	Low Pressure Gas Lamps.												High Pressure Gas Lamps.										
	"C" burner lamps.						Bombay lamps.																
	Single lights.	Double lights.	Triple lights.	Quadruple lights.	Quintuple lights.	Total Burners.	Single lights.	Double lights.	Triple lights.	Quadruple lights.	Total Burners.	Total Low Pressure Burners.	300 C. P. lamps.	500 C. P. lamps.	1,000 C. P. lamps with two 500 C. P. burners, 1 to burn after midnight at Lamington Road.	1,500 C. P. lamps with two 300 C. P. Subsidiary lamps to burn after midnight at Chowpaty.	1,500 C. P. lamps with three 500 C. P. burners, one to burn after midnight.	1,500 C. P. single burner lamps to burn all night at Walkeshwar.	1,500 C. P. lamps with one 500 C. P. subsidiary lamps to burn after midnight at Sandhurst Bridge.	3,000 C. P. lamps, with two 500 C. P. subsidiary lamps after midnight at Sandhurst Bridge.	3,000 C. P. lamps with three 1,000 C. P. burners, 1 to burn after midnight	Total High Pressure burners.	Grand Total.
A	752	16	2	8	5	847	294	143	7	1	605	1,452	14	3	.....	.....	8	.....	.....	.....	1	44	1,496
B	689	...	1	...	...	692	1	45	2	...	97	789	... ..	26	.....	.....	.....	.....	.....	.....	.....	26	815
C	711	...	...	...	...	711	9	36	17	...	132	843	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	843
D	854	...	2	...	...	860	90	37	19	...	221	1,081	2	4	11	14	17	1	3	1	.....	100	1,181
E	1,142	4	1	...	...	1,153	69	45	3	...	168	1,321	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	1,321
F	277	...	1	...	...	280	8	25	6	...	76	356	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	356
G	347	...	...	...	...	347	17	146	8	...	333	680	.....	.....	.....	.....	.....	.....	.....	.....	.....	...	680
Total No. of burners.	4,772	40	21	32	25	4,890	488	954	186	4	1,632	6,522	16	33	22	14	75	1	3	3	3	170	6,692

Electric Lamps.

Fourteen, 500 watt lamps are maintained by the Municipality near Wellington Fountain.

286. The total expenditure on gas lighting, including the charges for high pressure lamps for the year and also that on electrical lighting, amounted to Rs. 4,56,782-1-7.

287. Coal Controller's restrictions having been removed the 2-light lamps on Cadell Road and Lady Hardinge Road and the high pressure lamps in the city are being burnt to their full candle power.

Kerosine Oil Lighting.

288. The total number of kerosine oil lamps in the City at the end of the year under report was 1,174 as detailed below :—

Ward.	No. of lamps.	Remarks.
A	5	
B	105	
C	31	
D	91	
E	86	
F	487	
G	369	
Total ...	1,174	

289. Last year the number was 1,152. The difference is made up as follows :—

Transferred from C. I. Trust	10 lamps.
Provided in Wadala Cemetery	2 „
Temporarily put up on certain roads	10 „
	22 lamps.

290. In addition to these two health camps are maintained by this Department :—

One at Arthur Road	3 lamps.
„ „ Annesley Road	10 „

291. The Lamington Road camp of 9 lamps that was maintained last year was stopped on 21st May 1918.

292. The total cost of kerosine oil lighting during the year amounted to Rs. 34,834-5-11. Deducting from this Rs. 53-9-7 being the amount of departmental bills for lighting health camps and the amount recovered from private parties for breakage of lanterns, parts, &c., the net cost amounted to Rs. 34,780-12-4 which gives a rate of Rs. 29-10-0 per lamp per annum as against a rate of Rs. 28-7-7 last year, the increase being due to the higher cost of wages paid and materials for repairs purchased.

PRIVATE BUILDING CONSTRUCTION.

(Including set-backs.)

Buildings erected or altered.

293. The number of applications received under Section 337 for the erection of new buildings, and under Section 342 for alterations to existing buildings, during the year under report, as compared with those received during the preceding 4 years, is as follows : —

Year.	Under Section 337.	Under Section 342.	Total No. of buildings dealt with.	Total No. of applications.
1914-1915	880	1,068	1,948	3,558
1915-1916	930	1,124	2,054	3,461
1916-1917	1,252	877	2,129	3,286
1917-1918	1,050	987	2,037	3,105
1918-1919	668	601	1,269	2,668

294. It is frequently the case that two or more modified proposals are received in connection with one and the same building ; hence the difference between the figures in the last two columns of the above table.

The majority of the plans received were conditionally approved.

Set-backs.

295. The following is a comparative statement of the amounts expended on set-back from 1900-1901 to 1918-1919 :—

Year.	Paid from Capital.	Paid from Revenue.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
1900-1901	.....	1,05,008 14 11	1,05,008 14 11
1901-1902	.....	1,27,430 1 8	1,27,430 1 8
1902-1903	.....	82,189 14 9	82,189 14 9
1903-1904	.....	1,12,128 7 5	1,12,128 7 5
1904-1905	.....	1,48,751 15 5	1,48,751 15 5
1905-1906	79,736 0 2	1,57,747 15 7	2,37,483 15 9
1906-1907	1,90,118 7 11	1,18,347 2 8	3,08,465 10 7
1907-1908	1,53,791 11 10	1,00,000 0 0	2,53,791 11 10
1908-1909	3,98,183 1 5	1,00,000 0 0	4,98,183 1 5
1909-1910	2,92,501 2 2	1,00,000 0 0	3,92,501 2 2
1910-1911	1,54,672 1 10	1,00,000 0 0	2,54,672 1 10
1911-1912	2,41,054 1 2	1,11,313 0 0	3,52,367 1 2
1912-1913	2,10,729 9 1	1,14,894 0 0	3,25,623 9 1
1913-1914	2,21,745 13 7	1,01,663 1 9	3,23,408 15 4
1914-1915	4,34,918 10 5	1,09,199 10 1	5,44,118 4 6
1915-1916	* 6,03,819 0 4	1,05,684 8 1	* 7,09,503 8 5
1916-1917	96,173 3 11	1,22,699 8 2	2,18,872 12 1
1917-1918	19,277 8 8	1,59,595 15 3	1,78,873 7 11
1918-1919	2,05,566 2 1	1,46,561 3 5	3,52,127 5 6

* Inclusive of Rs. 3,57,682-2-3 on account of the unadjusted charges for 1915-16 and previous years.

296. The liability outstanding for land sanctioned to be acquired for set-backs amounted to Rs. 3,13,148-6-8.

297. Proposals were submitted for changing the regular lines of the following streets:—

Bora Bazar Street between Manordas and Fort Streets.

Diversion of Chikalwadi between Wallace Flour Mill and Sleater Road.

Parel Tank Road.

A portion of Mori Road, Mahim.

Mazwarpakhady Road at its junction with Church Street.

Ghoga Street between Cawasjee Patel Street and Parsi Bazar Street.

Dadar Road between the B. B. & C. I. Railway Level Crossing and Lady Jamsedji Road.

Lady Jamsedji Road from Portuguese Church Road to the Bombay Woollen Mill.

Do. do do. the Bombay Woollen Mill to Wanzawady.

Old Purbhadevi Road from Portuguese Church to Nardool Tank.

New Purbhadevi Road from its junction with Khed Gully to its junction with Old Purbhadevi Road.

Mahim Bazar Cross Lane for a distance of about 500 feet northwards from Mahim Bazar Cross Road.

298. The work of marking the regular lines and recording other information thereon is in hand.

Enforcement of Building Regulations.

299. 1,019 summonses were issued against house-owners under various Sections of the Municipal Act, with the results shown in the following statement:—

Section of the Municipal Act.	Number of prosecutions.	Number of cases withdrawn on compliance with requirements.	Number of cases in which parties were warned and discharged.	Number of convictions.	Number of postponements falling during the year 1919-20.	Fines.
						Rs. a. p.
231	4	3	1	....	....	....
246A	2	1	....	1	....	10 0 0
247	2	2	....	....	....	....
297 (3)	18	7	1	9	1	89 0 0
305	31	30	1	....	....	....
308	12	5	....	7	....	16 0 0
311	2	1	....	1	....	1 0 0
312	5	2	3	....	....	....
315	2	2	....	....	....	....
322	73	48	21	4	....	50 0 0
329	3	1	2	....	....	....
337	87	34	27	25	1	172 4 0
342	184	88	24	67	5	740 11 0
344A	1	....	....	1	....	5 0 0
349	5	5	....	....	....	....
349B	2	....	....	2	....	2 0 0
349C	1	....	....	1	....	30 0 0
349D	1	....	....	....	1	....
353	30	11	9	10	....	76 0 0
353A	216	68	39	103	6	1,114 9 0
354	204	81	34	81	8	2,395 8 0
378	126	47	26	52	1	973 0 0
By-law No. 9	1	1	....	....	....	....
,, ,, 49	6	4	1	1	....	25 0 0
,, ,, 46	1	....	....	1	....	15 0 0
Total ..	1,019	441	189	366	23	5,715 0 0

300. 20 notices were issued under Section 378 of the Municipal Act for the improvement of the insanitary buildings. In 13 cases the owners complied, and the remaining 7 were pending at the close of the year.

301. As regards the 69 cases under Section 378 which were pending at the close of the previous year, in 16 cases, the houses were vacated and in one case, the house was pulled down. In 26 cases, the necessary improvements were carried out and the remaining 26 cases were still pending at the close of the year.

302. Out of 460 notices issued under Section 354 of the Municipal Act, for the removal of unsafe structures, 365 were complied with, 15 were either cancelled or withdrawn in 1, departmental action was taken and the remaining 79 were pending at the close of the year.

303. 107 cases under Section 354 were pending at the close of the previous year. 106 of these were complied with and the remaining 1 was still pending at the close of the year.

304. Nine buildings or portions thereof fell during the year. There were no casualties in 7 cases and in the remaining two, 8 persons were injured and one was killed.

305. Action was taken under Sections 349 and 380 of the Act in 220 cases for the summary removal of inflammable and insanitary huts. Out of these, 176 were complied with, one was cancelled and in 11 cases, the huts were removed departmentally. The remaining 32 cases were pending at the close of the year.

306. 58 notices which were pending at the close of the previous year, were all complied with.

307. Applications were made to the Standing Committee for the removal of unauthorised work in twelve cases. In 2 cases permission was granted. In 6 cases, the owners removed the work and in 2 cases, the work was removed by the Municipality. The remaining 2 cases were pending at the close of the year.

308. Out of the three cases pending at the close of the preceding year, the work was removed by the party in one case and in the remaining two, the Standing Committee's sanction was obtained for the removal of the unauthorised work.

Floor Area of Tenements.

309. During the year under report, 1,188 buildings were surveyed with a view to registering their floor area. This brings the total number of buildings surveyed since the commencement of this work in the year 1914 to 5,646. The following statement shows the increase or decrease in the floor area of tenements in new and altered buildings in the City.

Statement showing the increase or decrease in the class and floor area of tenements in new and altered buildings completed during the year 1918-19:—

Ward.	DESCRIPTION.	Shops.		Godowns.		Residences.								Remarks.
						One room Tenement.		Two rooms Tenement.		Larger Tenement.		Servants' Quarters.		
		No.	Floor area.	No.	Floor area.	No.	Floor area.	No.	Floor area.	No.	Floor area.	No.	Floor area.	
			sq. yd.		sq. yd.		sq. yd.		sq. yd.		sq. yd.		sq. yd.	
A	Total floor area of buildings "after" they are altered or newly built	28	1,194	49	6,383	22	263	10	308	131	2,500	...	...	
	Do. do. "before" do. do.	16	460	34	840	1	15	18	481	106	2,076	...	...	
	Total increase in floor area of buildings in A Ward	12	734	15	5,543	21	248	—8	—173	25	424	...	...	
								Decrease.						
B	Total floor area of buildings "after" they are altered or newly built	49	1,774	63	6,563	...	...	15	477	520	10,451	...	...	
	Do. do. "before" do. do.	34	1,222	30	1,870	...	...	6	85	422	9,394	...	...	
	Total increase in floor area of buildings in B Ward	15	552	33	4,693	...	...	9	592	98	1,057	...	...	
C	Total floor area of buildings "after" they are altered or newly built	95	1,716	91	2,920	16	198	66	1,022	952	18,421	18	236	
	Do. do. "before" do. do.	46	1,009	60	1,773	15	178	64	988	865	14,901	3	35	
	Total increase in floor area of buildings in C Ward	49	707	31	1,147	1	20	2	34	87	3,520	15	201	
D	Total floor area of buildings "after" they are altered or newly built	43	924	35	1,171	90	1,382	4	119	827	20,058	135	1,908	
	Do. do. "before" do. do.	26	458	10	402	10	122	...	...	384	10,828	50	680	
	Total increase in floor area of buildings in D Ward	17	466	25	769	80	1,260	4	119	443	9,230	85	1,228	
E	Total floor area of buildings "after" they are altered or newly built	57	1,251	108	15,984	93	1,171	93	1,574	1,114	18,692	15	212	
	Do. do. "before" do. do.	28	916	42	8,123	64	844	12	181	265	4,651	8	97	
	Total increase in floor area of buildings in E Ward	29	335	66	7,861	29	327	81	1,393	849	14,041	7	115	

Ward.	DESCRIPTION.	Shops.		Godowns.		Residences.								Remarks.
						One room Tenement.		Two rooms Tenement.		Larger Tenement.		Servants' Quarters.		
		No.	Floor area.	No.	Floor area.	No.	Floor area.	No.	Floor area.	No.	Floor area.	No.	Floor area.	
			sq. yd.		sq. yd.		sq. yd.		sq. yd.		sq yd.		sq. yd.	
F	Total floor area of buildings "after" they are altered or newly built	79	1,187	10	1,001	231	3,189	216	2,551	67	1,929	19	262	
	Do. do. "before" do. do.	8	103	3	332	...	...	8	97	63	1,747	4	36	
	Total increase in floor area of buildings in F Ward	71	1,084	7	669	231	3,189	208	2,454	4	182	15	226	
G	Total floor area of buildings "after" they are altered or newly built	44	824	43	8,702	126	1,312	264	3,473	304	5,881	39	523	
	Do. do. "before" do. do.	6	187	21	5,646	23	379	6	103	144	2,682	9	125	
	Total increase in floor area of buildings in G Ward	38	637	22	3,056	103	933	258	3,370	160	3,199	30	398	
A to G	Total floor area of buildings "after" they are altered or newly built in all Wards.	395	8,870	399	42,724	578	7,515	670	9,524	3,915	77,932	226	3,141	
	Do. do. "before" do. do. do. ...	164	4,355	200	18,986	113	1,538	114	1,935	2,309	46,179	74	973	
	Total increase in floor area of buildings *in all Wards excluding City Improvement Trust Plots*	231	4,515	199	23,738	465	5,977	556	7,589	1,606	31,753	152	2,168	
	Total increase in floor area of buildings on City Improvement Trust plots ...	300	8,842	46	1,713	656	1,5578	343	13,141	270	27,927	188	2,266	
	Grand total showing the increase in floor area of buildings in the whole City of Bombay	531	13,357	245	25,451	1,121	21,555	899	20,730	1,876	59,680	340	4,434	

310. Miscellaneous increase of floor area of buildings in all Wards A to G :—

	No.	Sq. yds.
Public Buildings, Offices, Schools, Printing Presses, Clubs, Hostels, Police Stations, Cinema Theatres, &c.	94	5,615
Motor Garages, Coach Houses and Horse Stalls	91	2,883
Mills, Factories, Workshops, Tanneries, &c.	69	29,808
Miltch Cattle Stables and Bullock Stables	19	8,129
Temples, Mosques, Durgahs, Jamatkhana, Majanwadi, &c.	22	1,367
Sheds (for Shops and Godowns)	63	11,342
Total of miscellaneous increase of floor area in all Wards excluding City Improvement Trust Plots	358	58,494
Do. Do. on City Improvement Trust Plots		9,024
	858	67,518

311. The following statement shows the number of notices issued and the sections of the Municipal Act under which they were issued during the year 1918-19 :—

Section of the Municipal Act.	Particulars.	No. of notices.
231	To provide rain water eaves, gutters and downtake pipes	75
298 (2)	Intimation of intention to take possession of land occupied by buildings, &c., for street improvement	4
299	Intimation to take possession of land outside buildings for street improvement	50
305	To level, metal or pave, drain and light private streets	148
308	To remove projections and encroachments...	244
311	To remove or alter door or gatebar or window opening upon a street ...	17
313 (1)(*b*)	To remove any board or shelf within a height of 12 feet from the surface of the street	1
315	To remove structures or fixtures erected or set up before Section 312 came into force	16
329	To repair, protect, or enclose walls or dangerous places	13
349	To remove inflammable materials in external walls and roof covering ...	217
349 D	To provide sufficient means of egress	1
351 (1)	To remove, alter or pull down structures erected without Municipal approval	30
351 (2)	Intimation of intention to enter premises to give effect to requisitions under Section 351 (1)	13
353	To alter buildings erected or to amend works done contrary to the provisions of the Municipal Act or Building Bye-laws	271
354	To pull down unsafe structures	460
354 A	To remove persons carrying on or directing works unlawfully carried on.	312
378 (1)	To improve insanitary buildings	20
378 (2)	To declare unimproved buildings unfit for human habitation	70
380	To remove or alter insanitary huts or sheds	3
488	Intimation of intention to enter premises to give effect to the requisitions made under the several Sections of the Act	240
	Total ...	2,205

I have the honour to be,
Sir,
Your most obedient servant,

JAMES W. MACKISON, B.Sc., M.Inst. C.E.,
Executive Engineer.

WATER WORKS.

REPORT OF THE HYDRAULIC ENGINEER.

Tansa Lake.

The total rainfall for the year measured near the outlet from the lake was 61·83 inches or 43 per cent below the average for the preceding five years, the rainfall for the preceding five years being—

83·26 inches in 1913.
132·80 „ in 1914.
92·08 „ in 1915.
113·75 „ in 1916.
116·79 „ in 1917.

Rain fell on 88 different days and ranged from 1 to 6 inches per day on 16 occasions.

The lake commenced to overflow (at R.L. 414·58) on 18th August 1918 when the rainfall amounted to 47·06 inches and continued to overflow until 10th September 1918. The total quantity of water that passed over the waste weir was 10,467 million gallons.

The quantity of water delivered into the duct from the lake during the year was 14,654 million gallons, out of which 12,545 million gallons were received in the City, 21 million gallons were discharged into the Vehar Lake and the balance of 2,088 million gallons was lost by evaporation, overflow from syphon heads and leakage along the duct.

The quantity of water lost from the lake through supply, evaporation, leakage and absorption between 1st April 1918 and 31st May 1918 was 3,730 million gallons and between 1st November 1918 and 31st March 1919 was 8,588 million gallons, making a total loss of 12,318 million gallons for 212 days or an average of 58 million gallons per day.

The loss of water by evaporation from the lake averaged during the dry months ·22 inches per day equivalent to 0·18 million gallons per day, the observed monthly evaporation being as follows:—

Million Gallons.	Months.	Days.	Inches.
9·11	April 1918	30	11·00
6·48	May (1st to 25th) 1918	25	8·10
3·12	November 1918	30	3·40
4·10	December 1918	31	4·63
3·87	January 1919	31	4·57
4·10	February „	28	4·90
6·49	March „	31	8·10
37·27	Total	206 days	44·70

The lowest level to which the water was drawn was 402·52 feet above T.H.D., leaving 22·52 feet or 16,515 million gallons above the level of the lowest outlet.

The total leakage along the duct between Tansa and Ghatkoper measured at the close of the year was 2 million gallons per day.

The following are the results of chemical analysis made at different periods during the year :—

Date of Analysis.	Grains per gallon.		Parts per million.			Remarks.
	Total solids.	Chlorine.	Free Ammonia.	Albd. Ammonia.	Nitrites.	
April 1918, 1st part ...	7	·7	*Nil.*	·06	*Nil.*	No smell, clear, a few brown particles floating; vegetable matter and clay.
July 1918, 1st part ...	7	·6	*Nil.*	·09	*Nil.*	No smell, clear water, many white particles floating; vegetable matter and clay.
October 1918, 1st part ...	7	·6	*Nil.*	·064	*Nil.*	No smell, clear water, many white particles floating; vegetable matter and clay.
January 1919, 1st part ...	7	·7	*Nil.*	·08	*Nil.*	No smell, clear water, many brown particles floating; considerable vegetable matter and clay.

There were two outbreaks of Cholera in the City during the year and precautionary measures were taken to sterilize the whole supply from Tansa during the prevalence of these epidemics. A temporary chlorinating plant was erected alongside the duct at the south end of the Powai syphon and the whole supply as it passed through the duct to the City was treated with chlorine extracted from bleaching powder; tests for reaction being carried out at the same time at the Ghatkoper syphon chamber. The results obtained were entirely satisfactory, the bacteria count being at times reduced to as low as 40 per c. c.

Investigations and surveys for increasing the water supply from the Tansa lake are now being made. On 28th November 1918 the Municipal Corporation sanctioned a grant of Rs. 18,000 for the preliminary surveys. The necessary staff has been appointed and the work is now in progress.

Tulsi Lake.

The total rainfall for the year at Tulsi was 57·84 inches or 45 per cent below the average for the preceding five years, the rainfall for the preceding five years being :—

94·97 inches in 1913.
116·94 „ 1914.
85·46 „ 1915.
92·35 „ 1916.
138·28 „ 1917.

Rain fell on 61 different days and on 14 occasions it ranged from 1 to 6 inches per day. The lake did not overflow during the year, the highest level attained being 437·94 T. H. D. on 26th August when the rainfall amounted to 52·43 inches, the nett gain in the lake during the monsoon being only 0·42 inches, the lowest since its construction.

The total quantity of water lost from the lake by supply, evaporation, leakage and absorption between 1st April 1918 and 31st May 1918 was 350 million gallons, and between 1st November 1918 and 31st March 1919 was 442 million gallons, making a total of 792 million gallons for 212 days or an average of 3¾ million gallons per day.

The total quantity of water received in the City was 1,128 million gallons or the average of 3 million gallons per day.

The lowest depth to which the water in the lake was drawn before the break of the monsoon of 1918 was 437·92 feet above T. H. D. leaving 38·56 feet or 919 million gallons in the lake for further supply. The effect of the monsoon was very unsatisfactory and by the end of August when 36·73" of rainfall had been recorded the level of the water in the lake stood at 434·67 T. H. D. or 3·25 feet below the level it stood at before the break of the monsoon. The total contents available at the close of the monsoon was only 821 million gallons, and in order to maintain a supply from this source until the lake is replenished by the next monsoon, the normal daily supply had to be curtailed 50 per cent. from 17th September 1918.

The loss of water by evaporation from the lake averaged during the dry months 0·11 inches per day equivalent to 0·004 million gallons per day, the observed monthly evaporation being as follows :—

Month.	Days.	Inches.	Million gallons.
April 1918 (1st to 30th)	30	1·86	0·10
May „ (1st to 25th)	25	2·74	0·14
October 1918 (16th to 31st)	16	1·25	0 06
November 1918 (1st to 30th)	30	2·55	0·11
December „	31	2·70	0·10
January 1919	31	3·40	0·11
February „	28	4·80	0·12
March „	31	5·08	0·13
Total ...	222	24·38	0·87

The following are the results of Analysis made at different periods of the year :—

Date of Analysis.	Grains per gallon.		Parts per million.			Remarks.
	Total solids.	Chlorine.	Free Ammonia.	Albd. Ammonia.	Nitrites.	
April 1918 1st part ...	8	1	*Nil.*	·11	*Nil.*	No smell, clear, many green and brown particles floating, considerable vegetable matter and clay.
July „ „ ...	9	·9	·04	·34	*Nil.*	Slight smell, clear water, numerous green and brown particles floating with a few water fleas. Considerable vegetable matter and clay.
October „ „ ...	8	·9	*Nil.*	·12	*Nil.*	No smell, clear, many green particles floating with a few water fleas. Considerable vegetable matter and clay.
January 1919 1st part ...	9	1·1	·008	·22	*Nil.*	No smell, clear water, many green and brown particles floating with a few water fleas. Considerable vegetable matter and clay.

The entire catchment area of this lake being the property of the Municipality the dangers of pollution from habitation round the lake are comparatively remote and it was therefore not considered necessary to chlorinate the water supplied from this source during the prevelence of the cholera as in the case of the waters from Tansa and Vehar. The filtration of the Tulsi supply has however received consideration and on 27th January 1918 the Corporation sanctioned a grant of Rs. 1,50,000 for the construction of a set of Mechanical filters at Tulsi, and a filter plant of the Paterson type is now being constructed; Messrs. Jessop and Co, of Calcutta supplying the apparatus and filtering medium at a cost of Rs. 1,46,000. The construction of the filter house, chemical house, coagulating tanks and wash water reservoir is

being done departmentally. The work was commenced on 1st January 1919 but little progress has been made owing to the influenza epidemic and the difficulty of obtaining labour, cartage, and materials.

Vehar Lake.

The total rainfall for the year was 42·05 inches or 58·60 per cent below the average of the preceding five years, the rainfall for the preceding five years being :—

90·47 inches in 1913.
108·73 „ „ 1914.
91·60 „ „ 1915.
99·38 „ „ 1916.
117·78 „ „ 1917.

Rain fell on 59 different days and varied from 1 to 4 inches on 14 occasions.

The highest level to which the water in the lake rose during the year was 250·45 on 5th August 1918 when the rainfall amounted to 33·34 inches.

The total quantity of water received in the City during the year from the lake was 3,623 million gallons or an average of 10 million gallons per day.

The quantity of water lost from the lake through supply, evaporation, leakage and absorption between 1st April 1918 and 31st May 1918 was 1,230 million gallons and between 1st November 1918 and 31st March 1919 was 1,853 million gallons, making a total loss of 3,083 million gallons for 212 days or an average of 14½ million gallons per day.

The lowest depth to which the water in the lake was drawn before the break of the monsoon of 1918 was 251·02 feet above T. H. D., on 28th May 1918 leaving 20·52 feet or 4,637 million gallons available for consumption above the level of the lowest outlet.

The effect of the monsoon in this lake also was very unsatisfactory and by the 20th August when 34·85 inches of rainfall had been recorded the level of the lake was 1·12 feet below the level it stood at before the break of the monsoon. The total contents available at the close of the monsoon was 4,032 million gallons and in order to maintain a supply from this source until the lake is replenished by the next monsoon the normal daily supply has been curtailed 38 per cent., *viz.*, to 8 million gallons per day from 17th September 1918.

The loss of water by evaporation from the lake averaged during the dry months 0·12 inches per day equivalent to 0·02 million gallons per day the observed monthly evaporation being as follows :—

Month.	Days.	Inches.	Million gallons.
April 1918 (1st to 30th)	30	2·57	0·66
May „ (1st to 25th)	25	2·14	0·53
October 1918 (16th to 31st)	16	0·95	0·21
November 1918 (1st to 30th)	30	3·05	0·67
December 1918	31	3·35	0·73
January 1919	31	4·10	0·83
February „	28	4·50	0·89
March „	31	5·08	0·96
Total ...	222	25·74	5·48

The following are the results of Analysis made at different periods of the year :—

Date of Analysis.	Grains per gallon.		Parts per million.			Remarks.
	Total solids.	Chlorine.	Free Ammonia.	Albd. Ammonia.	Nitrites.	
April 1918, 1st part ...	7	1	*Nil.*	0·10	*Nil.*	No smell, clear, many brown particles floating with a few water fleas. Considerable vegetable matter and clay.
July 1918, 1st part ...	8	0·8	*Nil.*	0·146	*Nil.*	No smell, clear water, many green particles floating with a few water fleas. Considerable vegetable matter and clay.
October 1918, 1st part ...	8	1	*Nil.*	0·11	*Nil.*	No smell, clear water, many green particles floating. Considerable vegetable matter and clay.
January 1919, 1st part ...	8	0·9	*Nil.*	0·12	*Nil.*	No smell, clear water, numerous green particles floating. Considerable vegetable matter and clay.

The water supply from the Vehar Lake was chlorinated during the first epidemic of Cholera which occurred in the City during the year; chlorination during the second outbreak being considered unnecessary in the case of Vehar. The plant required for the purpose was erected at short notice at the Vehar Outlet Tower and chlorine added in suitable proportions, to the water as it entered the Tower; tests for reaction being carried out at Saki Sluice House about 2 miles distant from the lake.

Powai Lake.

The question of utilizing Powai Lake for the supply of water to Salsette had been under consideration during the year and it has been finally decided to purify this water and use the lake as a source of supply.

The existing masonry dam will be raised an additional 5 feet and new outlet works constructed. A masonry engine-house will be built at Powai and two sets of crude oil engines and centrifugal pumps installed. The whole supply will be pumped from thence to a set of Mechanical Filters to be constructed on the site of the old filters at Vehar. After filtration a supply up to a maximum of 2 million gallons per day will be passed through a Venturi Meter into a small service reservoir to be constructed adjacent to the filters from whence it will gravitate through distributing mains to be laid by Government to various parts of Salsette. The total yield from Powai when the dam is raised is estimated at 3 million gallons per day and the difference between this and the quantity supplied to Government for distribution to Salsette will be passed into the Vehar main to augment the supply to Bombay. The cost of the scheme exclusive of the distributing mains to Salsette is estimated at Rs. 3,50,000 and half of this cost will be borne by Government. Preliminary arrangements for carrying out the works have already been made and it is hoped to have the scheme completed and in operation within the next two years.

Maintenance Works.

There were 46 bursts during the year, *viz.* :—

No.	23	3″	diameter pipes.
,,	17	4″	,, ,,
,,	3	6″	,, ,,
,,	2	7″	,, ,,
,,	1	36″	,, ,,
	46		

The number of water connections made during the year was 405 including branch connections. Connections cut off for various reasons numbered 80 of which 65 were restored. The net increase therefore in the number of connections is 390. The total number of connections now stands at 26,222. The total number of Municipal meters at present in use is 2,030.

The total number of disconnection orders submitted to the Standing Committee from time to time during the year was 127 against 288 last year. All these were sanctioned by the Municipal Commissioner and the Standing Committee and have been dealt with as follows :—

(1) Disconnections not enforced owing to the requirements having been complied with	47
(2) Disconnections enforced	80
(3) Connections restored on compliance with Municipal requirements	65
(4) Connections remaining unrestored	15

Waste Prevention.

Waste Prevention operations were continued throughout the year with the result that 28,852 defects were found and repaired ; of these 12,043 were underground and 16,809 above ground.

The following comparative statement shows the total length of water mains examined during the year under report and the preceding five years:—

Period.	Excluding second and subsequent test.	Including second and subsequent test.
	Feet.	Feet.
From 1st April 1913 to 31st March 1914	45,317	2,356,067
From 1st April 1914 to 31st March 1915	11,356	2,464,100
From 1st April 1915 to 31st March 1916	62,669	2,382,793
From 1st April 1916 to 31st March 1917	4,704	2,541,769
From 1st April 1917 to 31st March 1918	.....	2,412,403
From 1st April 1918 to 31st March 1919	6,651	1,840,228

The total length of mains of all sizes examined during the year under report was 123 miles and 4,090 feet.

The number of defect notices issued during the year was 2,546 against—

3,968	issued	during	the year	1913-14
4,519	„	„	„	1914-15
4,386	„	„	„	1915-16
4,894	„	„	„	1916-17
5,197	„	„	„	1917-18

Particulars of defects detected and remedied, the number of diagrams taken, and the quantity of water found running to waste from 1st April 1918 to 31st March 1919 are given in the following statement.

Statement of Defects found on Mains and Service Pipes during the year ending 31st March 1919.

Month.	No. of Diagrams taken.	Total leakage discovered in Gallons per hour.	DEFECTS.																				TOTALS.
			Under Ground.								Above Ground.												
			Mains.		Sluice valves.	Hydrants.	Service pipes.	Stop taps.	Ferrule leak.	Miscellaneous Holes in Mains, etc.	Bib Taps.			Service pipes.		Ball Valves and Tanks.			Stop Taps leaking.	Meter Couplings Flanges, Holes, etc.	Miscellaneous.		
			Bursts.	Joints.							Re-washered.	Out of order.	Left open.	Leaking.	Without Tap.	B. V. out of order.	Tanks without B. Vs.	Tanks leaking.					
1918.																							
April ...	69	17,425	9	67	111	717	94	30	1	15	...	1,082	24	88	5	44	1	2	70	17	32	=	2,409
May ...	79	41,050	4	62	126	564	118	27	2	4	...	1,160	30	80	9	26	2	1	58	18	30	=	2,331
June ...	63	2,14,825	4	42	106	559	122	22	1	11	...	1,096	21	69	10	27	...	1	96	19	34	=	2,240
July ...	70	73,505	7	50	116	824	141	59	4	46	...	1,279	15	76	14	32	3	3	81	39	61	=	2,850
August ...	65	12,250	3	54	207	566	149	38	4	18	...	1,214	11	76	7	46	1	1	95	14	58	=	2,562
September ...	62	22,315	4	19	118	555	147	65	4	25	...	1,092	9	104	6	35	1	2	36	22	25	=	2,269
October ...	81	69,000	2	32	148	712	104	61	3	12	...	1,243	15	91	3	65	...	12	45	36	20	=	2,604
November ...	74	1,09,175	6	24	117	641	73	61	...	6	...	786	8	89	5	77	2	3	69	34	30	=	2,021
December ...	57	2,96,475	4	42	101	542	120	32	18	13	...	766	4	59	6	45	1	2	105	22	72	=	1,954
1919.																							
January ...	81	1,32,000	2	59	127	698	138	66	6	11	...	1,126	5	97	4	68	2	1	81	28	62	=	2,581
February ...	66	1,42,350	0	31	120	654	124	46	2	3	903	257	1	116	8	40	5	3	85	22	67	=	2,487
March ...	87	39,850	1	30	118	561	138	84	2	7	1,028	277	5	90	26	40	...	7	71	17	42	=	2,544
Total ...	854	11,70,220	46	512	1,515	7,593	1,468	591	47	171	1,931	11,378	148	1,035	103	545	18	38	892	288	533		28,852

Distributing and Service Mains.

In connection with the renewal and replacement of the existing water mains. and the laying of additional water mains, the following works were carried out during the year:—

(1) Laying 9″ main in the Improvement Trust Estate between Dadar and Kingsway (Scheme No. 5) (Length 700 feet).

(2) Laying 4″ main in the Improvement Trust Estate between Dadar and Kingsway (Scheme No. 5.) (Length 4,300 feet).

(3) Laying 5″ main between 6″ main in Ripon Road and 4″ main in New Souter Street. (Length 200 feet).

(4) Laying 6″ main in the East Agripada Estate, Road No. 1. (Length 790 feet.)

(5) Laying 6″ main in Lady Hardinge Road. (Length 3,000 feet.)

Reservoirs and Filters.

The work of replacing the old timber roofs over No. 2 Reservoir at Malabar Hill has been in progress throughout the year. This work is being done by Messrs. Marsland, Price & Co., Ld., in continuation of their contract for re-roofing the filters, and has been let out in two parts, the first comprising an area of 57,000 s. ft. at the north end of the reservoir is practically completed and the final section of the work is now well in hand. The whole work has however been considerably delayed on account of the restrictions placed by the Ministry of Munitions on the supply of cement. In conjunction with the work of re-roofing the reservoir, residential quarters for the Hydraulic Engineer are being constructed over the old inlet chamber at the north end of the reservoir adjacent to the new water tower. The masonry walls and wood work in the quarters is being done departmentally with the old material removed from the filters while the floor and roof forms part of the work entrusted to the Contractors.

Owing to the failure of the monsoon and the curtailment of the Tulsi supply, water has not been available at the filters since the close of the monsoon. The 12″ Ridge Road Syphon Main which was formerly supplied from the filters has therefore had to depend entirely on the old oil engine and pump which was put up in 1917 as a temporary measure during the work of roofing over the filters. The worn out condition of this engine has led to frequent break downs and on several occasions it was found necessary to supply the locality by means of water carts. To avoid any future trouble in this respect and to reduce the cost of pumping the 12″ main is now being lowered to the level of the floor of the reservoir for a length of 1,800 R. ft. so that no portion of the main will be above the hydraulic gradient line, and water through the main will in future be supplied by gravitation. No important works were carried out at the Bhundarwada or John Hay Grant Reservoirs during the year.

General Remarks.

The revision of rules for the licensing of plumbers has been under consideration during the year and under the revised rules adopted by the Corporation every applicant for a license to carry out plumbing work in the City is now required to be properly qualified before a license will be granted or renewed.

The framing of by-laws for private water connections is also under consideration.

The vital points of the water supply have been under the protection of the Military Authorities during certain periods of the great war and throughout the periods of unrest and disturbances in India. Military guards were posted and maintained at various places and direct telephonic communication established with the Brigade Head Quarters.

Financial.

The Budget grant for the maintenance of the Water Department for the year 1918-19 was Rs. 5,32,208, which with the lapsed grants renewed and with the transfers and additional grants sanctioned amounted to Rs. 5,91,658-11-3. The total expenditure incurred against this sum and paid for during the year amounted to *Rs. 4,38,723-3-1, leaving an unexpended balance of Rs. *1,52,935-8-2, a portion of which will be renewed in 1919-20 to meet the liabilities incurred during the year.

1.	Number of cases disposed of	2,900
2.	Number of vouchers received and passed	1,840
3.	Number of Departmental and Private Works bills prepared and forwarded...	837
4.	Number of references made to Inspectors for certificates on vouchers	1,540
5.	Number of reports and certificates received from Inspectors ...	1,540
6.	Number of requisitions received and forwarded...	1,392
7.	Number of notices issued in connection with defective pipes and fittings	2,546
8.	Total number of contracts executed	4
9.	Number of advices sent to the Chief Accountant	1,821

* These figures are subject to revision by the Chief Accountant.

FIRE BRIGADE.

I have the honour to submit my Annual Report on the working of the Brigade for the year 1918-19.

Calls.—Calls to fires or supposed fires during the year totalled 437 resulting in 289 fires, two chimney fires, one fire at Bandra, 38 false alarms and one call to fallen building. The number of fires as well as the false alarms are one less than last year.

Fires.—Fires extinguished by the Brigade totalled 147, including the 2 chimney fires and the one at Bandra and 145 were extinguished before the arrival of the Brigade. The most disastrous fire of the year occurred at Musjid Station Road, Mandvi, on January 2nd, 1919, where the 4 upper floors of a 5-floored tenement building were nearly burned out and four women lost their lives by suffocation. 19 persons were rescued by the Brigade by means of an escape and smaller ladders from neighbouring roofs. Full details of this fire have already been submitted. Other serious fires occurred at Alexandra Dock on May 23rd, 1918, and March 13th, 1919, Sandhurst Road, on November 3rd, 1918, Prince's Dock, November 13th, Musjid Siding Road, Mandvi, November 14th, Dockyard Road, Mazagon, November 27th, Victoria Docks, November 29th and Chinchbunder Road on December 19th. Twenty ship fires were attended during the year. Only 8 however proved serious. See Appendices IV, V and VI.

Fire Loss.—The estimated loss amounted to Rs. 41,52,374 while property at risk has been rated at Rs. 2,75,87,870. Of this amount it is estimated that Rs. 37,16,928 was covered by insurance and Rs. 4,35,446 was uninsured. Compared with the previous year there is an increase of Rs. 21,30,096, which is mainly attributable to the huge cotton fire at Prince's Dock on November 13th, and the several other large fires that followed the signing of the Armistice. Low pressure of water due to the intermittent supply in certain localities also contributed to the increase. For comparative statement, see Appendix VII.

Water Supply.—The water supply generally throughout the year was satisfactory but first arrivals of the Brigade were handicapped on several occasions by low pressure. See preceding para. The attendance of the Water Department Staff was prompt however and every assistance that could possibly be rendered was rendered. The approximate quantity of water delivered at fires amounted to 95,12,400 gallons or 42,466 tons of which 38,14,650 gallons were taken from the mains and 56,97,750 gallons from sea and docks, etc.

Lives Lost.—Five persons lost their lives at fires and seven received such injuries that they subsequently succumbed. Seventeen received minor injuries but have since recovered. First Aid was rendered by the Brigade on 11 occasions. See Appendix V.

Fire Alarms.—The fire alarm system continues to work satisfactorily. Of the 437 calls to fires 212 were received by fire alarms. The erection of 25 additional alarms is now in hand and it is expected that the whole will be in working order shortly. A map showing the distribution, fire stations and positions of fires of the year is attached.

New Stations.—Owing to the war nothing has been done in this direction during the year under review, but it is hoped that the work of constructing new stations at Fort, Sewri and Naigaum will be taken in hand next year.

New Appliances.—Owing to the conditions brought about by the termination of the war new appliances, etc., on order have not been delivered. 8,000 feet of hose was purchased locally to supplement our stock which was getting low as at the time there appeared little hope of deliveries of hose from the United Kingdom being effected. 5,000 feet on order however was shortly after delivered.

General.—The full strength of the Brigade could not be maintained throughout the year, owing to the absence of suitable applicants. Much sickness occurred amongst the staff and during the Influenza epidemic 40 per cent. of the Brigade were on sick list, including five officers one of which had to proceed to England on long leave. One officer is still on Active Service.

Two officers, 2 tindals and 2 firemen died during the year and 32 men were invalided, resigned or otherwise left the service. Several received injuries but only one proved serious. The man was granted a full pension.

Brigade appliances were turned out on 8 occasions to fallen buildings. One child aged 7 years lost her life by being overwhelmed and 12 persons received injuries, all of whom have since recovered. 18 persons were rescued by the Brigade from the top floor of a three-floored building by means of an escape. The Brigade was also summoned on two occasions to recover bodies of 2 persons fallen into wells.

One hundred and eighty-eight premises were inspected in connection with dangerous trades, etc., 29 theatres, cinema halls and circus tents and 17 Military, Railway and Port Trust buildings were also inspected. In this connection it will soon be necessary to appoint a special inspecting officer to cope with the work which is increasing daily.

Hydrant inspection was carried out periodically throughout the year and the staff at the Municipal Office and Arthur Crawford Market regularly drilled.

It has not been possible to continue the " First Aid to the injured " classes this year.

The distance covered by the motor appliances to and from the 437 calls of fires totalled 3,627½ miles.

The Police, Officers of the Water Department and Salvage Corps as usual rendered every assistance. To all of these I wish to express my thanks.

I have the honour to be,
Sir,
Your most obedient servant,
T. C. GREENOP,
Chief Officer, Fire Brigade.

Budgetted strength and equipment of the Brigade :—

Strength.

1	Chief Officer,	7	First Class Tindals,
3	Clerks.	8	Second Class Tindals,
1	Head Foreman,	9	Third Class Tindals,
7	Foremen,	40	First Class Firemen,
1	Mechanic,	145	Second Class Firemen,
8	Engineers,	6	Coachmen,
1	Fitter,	2	Grooms,
1	Head Tindal,	4	Mochis,
16	Motor Tindals (Drivers),		

Making a total of 260 men of all ranks.

Equipment.

4	Horse-drawn Engines.	3	Manual Engines.
4	Petrol Motor Engines.	1	Hose and Store Van.
4	Steam Motor Engines.	1	Emergency Van.
2	Petrol Motor Tenders.	1	Brake.
1	Motor Turntable Ladder.	9	Horses.
15	Hose Reels.	1	Motor Car.
9	Hand Fire Escapes.	38,500	feet of Hose, and other small appliances.
1	Hose and Ladder Truck.		

APPENDIX I.

Statement showing the Distribution of Engines, etc.

Numbers.	Stations.	Petrol Motor Pumps.	Motor Steamers.	Horsed Steamers.	Manuals.	Hose Reels.	Hose and Ladder Truck.	Motor Tenders.	Motor Ladders.	Fire Escapes.	Smoke Helmets.	Hose Van.	Brake.	Emergency Van.	Horses.	Delivery Hose, 50 feet.	Foremen.	Motor Mechanic.	Engineers.	Fitters.	Motor Drivers.	First and Second Class Tindals.	Third Class Tindals.	Firemen of Grades.	Drivers.	Grooms.	Mochies.	Remarks.
1	Byculla ...	...	1	3	...	1	...	...	...	2	...	1	1	1	7	263	1	1	4	1	5	5	1	39	5	1	1	Head Quarters, Escape carried on Motor Tender.
2	Haines Road ...	1	...	...	...	...	...	1	...	1	1	...	...	...	...	65	1	...	...	...	3	1	1	17	...	...	...	
3	Gowalia Tank ...	1	...	...	...	1	...	...	...	1	...	...	...	...	...	49	1	...	...	...	1	1	1	23	...	...	1	Escape carried on Motor Pump.
4	Chinchpokli ...	1	...	...	...	1	...	...	...	1	...	...	...	...	...	52	1	...	...	...	1	1	1	19	...	...	2	Escape carried on Motor Pump.
5	Babula Tank ...	...	1	...	...	1	...	1	...	1	...	...	...	...	...	74	1	...	1	...	2	1	1	16	...	...	...	Escape carried on Motor Tender.
6	Fort... ...	...	...	1	...	1	...	...	...	1	...	...	...	...	2	38	1	...	1	...	...	1	1	12	1	1	...	
7	Colaba ...	1	...	...	1	4	...	...	...	1	...	...	...	...	...	63	1	...	...	...	1	1	1	16	...	...	...	Escape carried on Motor Pump.
8	DeLisle Road ...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	15	...	...	...	...	...	1	...	7	...	...	...	
9	Mahim ...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	15	...	...	...	...	...	1	...	7	...	...	...	
10	Dadar ...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	13	...	...	...	...	...	1	...	7	...	...	...	
11	Bhuleshwar ...	...	1	...	...	1	...	...	...	1	...	...	...	...	...	42	...	...	1	...	1	1	1	6	...	...	...	
12	Mandvi ...	...	1	...	...	2	...	...	1	...	1	...	...	...	...	64	1	...	1	...	2	1	1	16	...	...	...	
	Total ...	4	4	4	3	15	1	2	1	9	2	1	1	1	9	753*	8	1	8	1	16	16	9	185	6	2	4	* Total hose in feet 38,500.

APPENDIX II.

MUNICIPAL FIRE BRIGADE.

Summary of calls to fires (including false alarms) showing the number of times that appliances were used for attending and extinguishing fires during the year 1918-1919:—

STATIONS.	No. of Fire Alarms attached.	How called.						Appliances attended.									How extinguished.									Sprinklers actuated.	Remarks.
		By Stranger.	By Police.	By Fire Alarms	By Exchange Telephone.	By Private Telephone.	Total.	Manuals.	Hose and Ladder Truck.	Hose Reels.	Horsed Steamer	Motor Steamers.	Motor Pumps.	Motor Tenders.	Motor Turnable Ladder.	Hand Escapes.	Hose Van, etc.	Buckets.	Hand Pumps.	Chemical Extinguisher.	1st Aid Machine.	Hydrants.	Steamers.	Motor Pumps.	Manuals.	Sand.		
Byculla ...	10	4	...	37	188	...	229	...	...	2	16	50	...	...	...	5	26	...	1	...	...	4	15	...	...	...	121	Head Quarters.
Haines Road...	...	1	...	...	...	...	1	...	...	...	...	...	97	3	...	...	...	4	...	...	...	7	...	17	...	...	...	
Gowalia Tank.	9	2	...	9	...	...	11	...	...	20	...	...	68	...	...	27	...	5	...	...	...	5	...	19	...	...	...	
Chinchpokli ...	7	1	...	31	...	...	32	...	...	39	...	...	95	...	...	...	...	2	...	1	...	22	...	17	...	1	...	
Babula Tank...	...	2	1	...	...	...	3	...	...	1	...	168	...	182	...	...	...	2	...	...	6	9	22	...	...	...	...	Fire Alarm system temporarily attached to other stations.
Fort	9	3	3	13	...	...	19	...	...	5	61	...	...	...	...	26	...	5	...	...	...	3	4	...	...	3	...	
Colaba ...	6	6	...	6	...	...	12	...	...	16	...	...	41	...	...	36	...	4	4	...	...	2	...	10	...	...	...	
DeLisle Road...	1	...	1	2	...	...	3	2	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Dadar ...	8	1	...	5	...	...	6	1	...	9	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	
Mahim ...	1	1	1	3	...	...	5	...	2	2	...	...	...	...	...	...	...	...	1	...	...	4	...	...	...	...	...	
Bhuleshwar ...	13	5	1	48	...	...	54	...	...	46	...	119	...	...	...	63	...	2	2	4	...	7	18	...	...	1	...	
Mandvi ...	14	2	2	58	...	...	62	...	...	1	...	97	...	...	93	...	...	10	1	1	...	8	16	...	...	...	...	
Total ...	78	28	9	212	188	...	437	3	2	158	77	434	301	185	93	157	26	31	9	6	6	74	75	63	...	5	121	

APPENDIX III.

LIST OF CAUSES OF FIRES DURING THE YEAR 1918-1919.

Causes.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total.
Ashes, hot	...	...	...	...	...	...	1	2	1	...	...	...	4
Carburation of oil engine defective	...	...	...	1	...	...	...	...	...	...	...	...	1
Chimney, spark from	1	...	...	...	...	...	...	...	...	...	...	...	1
Dammer, boiling over	...	...	2	...	...	...	...	...	...	...	...	...	2
Defective flue	...	...	...	1	...	...	...	1	...	...	...	...	2
Doubtful	1	...	...	...	...	...	...	...	1	1	1	...	4
Electric Circuit, defective	...	2	2	4	4	1	3	...	1	3	1	1	22
Fat, boiling over	...	1	...	1	...	1	...	...	...	1	...	...	4
Fire, children playing with	2	...	...	...	...	...	...	...	...	...	...	...	2
Fire, spark from	3	2	2	2	2	...	2	2	2	1	B 1+1	3	22+ B1
Fireplace, overheat of	...	...	1	...	...	1	...	1	1	1	1	...	6
Foul flue	...	...	...	...	...	...	...	...	...	...	C 1	C 1	C 2
Furnace, overheat of	...	...	...	...	...	1	...	...	...	...	...	...	1
Gas, escape of	...	...	...	...	...	...	...	1	...	...	...	...	1
Incendiarism	...	...	...	...	...	...	...	...	1	...	...	...	1
Kerosine oil lamp, bursting of	...	1	...	...	...	...	...	...	...	...	...	...	1
Kerosine oil lamp, overheat of	3	1	2	1	...	...	...	...	1	...	...	...	8
Kerosine oil, lamp upset	2	...	...	2	2	1	1	1	3	2	...	1	15
Kitson lamp, exploded	...	...	1	...	...	...	...	...	...	...	...	1	2
Kitson lamp, overheat of	...	...	...	...	...	...	...	...	...	...	...	1	1
Locomotive, spark from	1	...	...	...	...	...	...	1	...	...	...	...	2
Light thrown down	5	1	3	7	4	...	9	8	5	8	6	5	61
Lime slaking	...	...	...	...	1	...	...	...	...	...	...	...	1
Machinery, friction of	1	...	2	1	1	1	...	...	...	...	...	...	6
Matches, children playing with	1	...	...	...	...	...	...	...	...	1	...	...	2
Matches, explosion of	...	...	...	...	...	...	...	...	...	1	...	...	1
Naked light, clothing, decorations, etc., coming in contact with	...	...	1	...	...	1	...	...	...	...	...	...	2
Naked light, petrol, vapour, etc., coming in contact with	...	...	...	3	...	...	1	...	...	...	1	...	5
Oil boiling over	...	...	1	...	...	...	...	...	1	...	...	1	3
Oil engine, overheat of exhaust pipe	...	...	...	...	...	1	...	...	...	...	...	...	1
Oil lamp, overheat of	...	...	...	...	...	...	1	1	1	...	...	...	3
Oil lamp, upset	...	3	1	2	...	...	...	...	1	...	...	...	7
Oil Vat, defective	...	...	...	...	...	1	...	...	...	...	...	...	1
Painters at work	...	...	...	...	...	...	...	1	...	...	1	...	2
Rubbish, burning	...	...	...	...	1	...	...	...	...	1	...	...	2
Ship-wrights at work	...	...	...	...	...	...	...	...	...	1	...	...	1
Spontaneous ignition	3	2	1	1	...	1	1	...	1	1	...	...	11
Stove oil, upset	...	...	...	...	...	...	1	...	...	...	...	...	1
Stove primus, bursting of	1	...	1	1	1	...	1	...	...	1	...	...	6
Stove Primus, overheat of	...	...	...	...	...	1	...	...	...	...	...	...	1
Suicide	1	...	...	1	...	...	...	...	...	...	...	...	2
Tar boiling over	...	1	1	...	...	...	...	...	...	...	...	...	2
Tail lamp, overheat of	...	...	1	...	...	...	...	...	...	...	...	...	1
Tobacco drying	...	2	...	1	...	...	...	...	...	...	...	...	3
Tobacco smoking	...	...	...	...	...	...	...	...	...	...	1	...	1
Unknown	3	2	2	3	3	4	1	16	12	7	2	5	60
Welders at work	...	...	...	...	...	...	...	...	...	1	...	...	1
Total	28	18	24	32	19	15	22	35	32	31	15 C 1 B 1	18 C 1	289 +C2 +B1

APPENDIX IV.

LIST OF FIRES THROUGH WHICH PROPERTY TO THE EXTENT OF Rs. 2,000 AND UPWARDS WAS DESTROYED DURING THE YEAR 1918-19.

Date.	Locality.	Description of property destroyed.	Estimated loss.
1918.			Rs.
3rd April ...	Bastion Road	Theatre	10,000
4th ,, ...	Sewree Reclamation	Fodder	3,200
10th ,, ...	Alexandra Dock	Military stores	51,000
15th ,, ...	Sewree Reclamation	Office & General Workshops ...	7,000
17th ,, ...	Khoja Street	Shops and dwellings	6,156
21st ,, ...	Tardeo Road	Cotton Mill	5,000
19th May ...	Baroda Street, Mandvi	Gunny bags godown	5,010
23rd ,, ...	Alexandra Dock	Steamship	1,50,000
30th ,, ...	Bapty Road	Cotton cleaning factory ...	6,000
5th June ...	Mangaldass Road	Tailors' Workshops	5,860
11th ,, ...	Fergusson Road	Cotton Mill	20,000
23rd ,, ...	Vincent Road	Military labour camp	3,000
7th July ...	Sk. Memon Street	Tailors' shop	17,110
9th ,, ...	Parel Road, Bhendi Bazar ...	Shops and dwellings	2,350
20th ,, ...	Lady Jamsetji Road	Woollen Mill	5,400
22nd ,, ...	Khetwady Main Road	Oil godown	5,000
24th ,, ...	Khetwadi Main Road	Motor garage	11,050
27th ,, ...	DeLisle Road	Cotton Mill	2,500
18th August ...	Alexandra Dock	Steamship	50,000
23rd ,, ...	Custom House Road, Fort ...	Motor garage	12,200
26th ,, ...	Khetwadi Back Road	Motor garage	21,000
31st ,, ...	DeLisle Road, Chinchpokli ..	Cotton Mill	2,000
2nd September ...	Argyle Road, Mandvi	Oil Mill	53,000
13th ,, ...	Messent Road	Military stores...	5,000
22nd ,, ...	Mount Road, Mazagon... ...	Oil Mill	3,000
24th ,, ...	Belvedere Road, Mazagon ...	Oil Mill	15,000
27th ,, ...	Victoria Bunder, Colaba	Cotton	2,000
2nd October ...	Kalachowki Road, Chinchpokli.	Dwellings	3,500
30th ,, ...	Alexandra Dock	Gunny bags	8,000
1st November ...	Karwar Street, Fort	Second-hand dealer	3,000
3rd ,, ...	Sandhurst Road	General shops	1,39,950
13th ,, ...	Prince's Dock	Cotton	16,15,250
14th ,, ...	Musjid Siding Road	Matches and seed godown ...	3,09,000
18th ,, ...	Ghorupdeo Road	Hay stores	19,200
20th ,, ...	Chinchpokli Road	Timber, etc.	17,500
22nd ,, ...	Alexandra Dock	Steamship	50,000
22nd ,, ...	Dontad Street, Mandvi... ...	Copra godown	6,000
27th ,, ...	Dock Yard Road	British India Steam Navigation Company's Yard.	2,00,000
29th ,, ...	Victoria Dock	Steamship	3,00,000
30th ,, ...	Sewree Oil Bunder	Prow of kerosine oil	11,500
1st December ...	Caukla Street, Mandvi	Shops and dwellings	36,000
9th ,, ...	Apollo Reclamation	Cotton	10,000
10th ,, ..	Alexandra Dock	Steamship	50,000
12th ,, ...	Wood Bunder, Mazagon ...	Timber	6,000
18th ,, ...	Dharavi Road	Bullock stable	2,900
19th ,, ...	Chinch Bunder Road	Seed and Oil godown	1,31,500
24th ,, ...	Alexandra Dock	Seed, etc.	2,500
27th ,, ...	Chandanwadi	Cinematograph film store ...	52,700
1919.			
2nd January ...	Musjid Station Road	Oil & Copra godown & dwellings	1,38,000
3rd ,, ...	Love Lane, Mazagon	Engineer's store	35,230
6th ,, ...	Sewree Koliwada	Dried fish godown	40,300
26th ,, ...	2nd Clive Cross Lane	Match godown	15,250
26th ,, ...	Government House Gate Road ..	Loose cotton	10,000
29th ,, ...	Prince's Dock	Steamship	50,000
3rd February ...	Musjid Bunder Road	Dwelling	26,200
7th ,, ...	Gamdevi Road...	Loose cotton	10,000
27th ,, ...	Narayan Dabholkar Road ...	Unoccupied dwelling	15,000
5th March ...	Apollo Reclamation	Cotton	30,000
13th ,, ...	Alexandra Dock	Steamship	2,00,000
16th ,, ...	Sk. Memon Street	Cotton	10,000
18th ,, ...	Bardan Street	Gunny Cloth godown	69,000
28th ,, ...	Churni Road	Motor lorry on road	3,100

APPENDIX V.

SUMMARY OF LIVES LOST AT FIRES DURING THE YEAR AND OF PERSONS WHO RECEIVED SUCH INJURIES THAT DEATH SUBSEQUENTLY ENSUED.

Date.	Time.	Place	Remarks.
23rd April 1918 ...	10-20 A.M. ...	Jelabhai Street, Ripon Road.	Sayabai Sidic, aged 25 years, severely burned about body. Removed to hospital. Since dead.
9th May 1918 ...	8-6 P.M. ...	Belevedere Road, Mazagon.	Hawabai, aged 35 years, severely burned on body, treated by the Brigade and removed to hospital. Since dead.
16th June 1918 ...	6-22 A.M. ...	Kika Street, Pydhonie.	Motibai, aged 16 years, severely burned about body. Treated by the Brigade and removed to hospital. Since dead.
2nd July 1918 ...	5-58 A.M. ...	Sewree New Road.	Laxooman Dewar, aged about 23 years, severely burned about body. Treated by the Brigade and removed to Hospital. Since dead.
3rd July 1918 ...	7-40 A.M. ...	Khola Street, Mandvi.	Ratanbai Shamji, aged 18 years, severely burned about body. Removed to Hospital. Since dead.
2nd October 1918 ...	2-45 A.M. ...	Gola Lane, Fort...	Dowlatbai Bahamanbai, aged about 38 years, severely burned about body. Treated by the Brigade and removed to Hospital. Since dead.
1st December 1918.	10-5 A. M. ...	Love Lane, Mazagon.	Nigarasterbai, aged 14 years, severely burned about body. Removed to Hospital before the arrival of the Brigade. Since dead.
12th December 1918.	10-50 A.M. ...	Sewree New Road.	Manabai, aged 9 months, burned to death.
2nd January 1919 ...	9-28 A.M. ...	Musjid Station Road, Mandvi.	Laxmibai, aged 38 years, Jankibai aged 25 years, Durgabai, aged 25 years, and Parwatibai, aged 20 years, burned to death.

APPENDIX VI.

BRIEF DETAILS OF THE MOST SERIOUS FIRES OF THE YEAR.

Date.	Time.	Place.	Business.	Extinguished by	Damage.	Estimated loss.
1918. 23rd May.	6-55 P.M.	No. 9 Berth, Alexandra Dock	Steamship.	Firemen with 3 motor steamers, 3 motor pumps and private appliances.	A Steamship of 2,799 tons register. Contents of No. 1 and 2 holds consisting of 4,000 bales of hay and 1,000 tons general cargo damaged by fire and ditto of No. 3 hold consisting of 2,000 bales of hay and 400 tons of general cargo slightly by heat, smoke and water and about 40×20 feet of ship side and deck plates severely by heat.	Rs. 1,50,000
3rd Nov.	12-16 A.M.	Sandhurst Road, Null Bazar.	Dealer in matches etc.	Firemen with 3 motor steamers and 3 motor pumps.	Three corrugated iron ground floor buildings, front, middle and rear 150×50, 80×30 and 150×50 feet respectively, covering an area of about 150×150 feet comprising 66 shops used as match dealers oil and general shops, Buildings and about 40 shops and contents severely damaged by fire and partly fallen down and contents of about 12 ditto slightly by heat, smoke, water and breakage.	1,39,950

Date.	Time.	Place.	Business.	Extinguished by	Damage.	Estimated loss.
1918.						Rs.
13th Nov.	9-33 A.M.	No. 5/10 Shed, Prince's Dock.	Cotton merchants.	Firemen with 4 motor steamers, 4 motor pumps and 6 Port Trust hydrants.	A building of one floor 200 ×150 feet used as godown and contents comprising 17,300 bales of cotton severely damaged by fire, heat, smoke and water and roof off.	16,15,250
14th Nov.	12-27 P.M.	Musjid Siding Road, Mandvi.	Dealer in matches.	Firemen with 4 motor steamers, 1 motor pump and 2 hydrants.	A building of one floor 180×50 comprising two compartments used as match and seed godowns and contents severely damaged by fire, heat, smoke and water and roof off.	3,00,000
27th Nov.	6-20 P.M.	Dockyard Road, Mazagon.	British India Steam Navigation Company's Dock yard.	Firemen with 4 motor steamers, 3 motor pumps, 1 horsed steamer and private appliances.	A range of corrugated iron roofed open shed buildings 150×100 feet used as boiler house, carpenters' workshops and timber stores, etc., and contents nearly burned out and fallen down and a quantity of timber adjoining severely damaged by fire and roofs of building adjoining slightly by heat, smoke and water. The whole covering an area of about 180×100 ft.	2,00,000
29th Nov.	1-0 A.M.	No. 6 Berth, Victoria Dock.	Steamship.	Firemen with 4 motor steamers, 3 motor pumps, 1 horsed steamer and private appliances.	A steamship of 3,725 tons register. No. 2 lower hold and contents comprising 798 bales of cotton etc., etc., severely damaged by fire, heat, smoke and water and ship's side plate by cutting away.	3,00,000
19th Dec.	4-36 A.M	Chinch Bunder Road, Mandvi.	Seed and oil merchants.	Firemen with 3 motor steamers, 3 motor pumps and 2 horsed steamers.	A corrugated iron building of one floor 180×130 feet used as seed and oil godown and contents severely damaged by fire, heat, smoke and water and partly fallen down. (Late call received).	1,31,500
1919.						
2nd Jan	9-28 A.M.	Musjid Station Road, Mandvi.	Oil and Copra merchants.	Firemen with 4 motor steamers, 4 motor pumps and 2 horsed steamers.	A building of 5 floors 100×60 feet used as godown and dwellings over. Four upper floors used as dwellings and contents nearly burned out, roof off and partly fallen down. Lower part of building used as oil and seed godowns and contents severely damaged by fire, heat and water.	1,38,000
13th Mar.	12-1 A.M.	No. 14 Berth, Alexandra Dock.	Steamship.	Firemen with 4 motor steamers, 3 motor pumps, 2 horsed steamers and private appliances.	A steamship of 3,691 tons register. Contents of No. 2 hold consisting of hay and rolling stock, etc., damaged by fire and water saloon and cabins over and contents slightly by heat and smoke and deck plate of ship's side by cutting away.	2,00,000

APPENDIX **VII.**

MONTHLY SUMMARY OF FIRES AND ANNUAL LOSSES FOR THE PERIOD 1909-1910 TO 1918-1919.

YEAR.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total.	Estimated Loss.
1909–1910.	9	18	8	7	6	4	9	5	7	10	17	9	109	15,05,557
1910–1911.	8	8	9	14	3	2	7	18	16	8	13	11	117	5,76,742
1911–1912.	12	8	4	7	8	12	14	7	13	11	11	17	124	23,04,703
1912–1913.	14	9	5	11	10	13	14	13	23	17	17	16	162	15,20,093
1913–1914.	14	11	11	2	10	5	14	29	29	27	35	37	224	64,75,696
1914–1915.	48	42	39	15	14	17	17	27	14	19	17	11	280	30,19,569
1915–1916.	20	15	12	13	11	12	9	25	13	19	12	15	176	6,36,503
1916–1917.	13	20	15	4	12	8	12	18	17	20	16	25	180	5,57,837
1917–1918.	58	22	16	8	14	14	14	31	25	34	22	32	290	20,22,278
1918–1919.	28	18	24	32	19	15	22	35	32	31	15	18	289	41,52,374

APPENDIX **VIII.**

Prosecution for malicious interference with Fire Alarms during the year 1918-19 :—

Date.	Nature of Offence.	Police Court and Magistrate.	Remarks.
7th April 1918 ...	Breaking the glass of fire alarm at Ghorupdeo Road and giving false alarm of fire.	4th Presidency Magistrate, Mazagon Police Court.	Kassam Esa, aged 20 years, fined Rs. 10.
25th June 1918 ...	Breaking the glass of fire alarm at Pychonie and giving false alarm of fire.	.....	Adam Mahomed, aged 25 years, certified insane and removed to the lunatic asylum by order of the Commissioner of Police.
15th Sept. 1918 ...	Breaking the glass of fire alarm at Bhoiwada Cross Road, and giving false alarm of fire.	Honorary Presidency Magistrate's Bench, Dadar Police Court.	Padro Antoul, aged 35 years, fined Rs. 50 or in default 21 days imprisonment.

DHARAVI ROAD
JAMSETJEE ROAD
ELPHINSTON ROAD
FERGUSON ROAD
SEWRI NEW ROAD
19
8
4

Map of the
ISLAND OF BOMBAY
SCALE 2400 FEET TO AN INCH.
Fire Stations shown thus
Fire Alarms do do
do do in course of erection
Fires shown thus
Private Fire Lines
MALABAR POINT
TOWER OF SILENCE
PRINCES DOCK
VICTORIA DOCK
DOCK YARD
COTTON
SITE OF NEW STATION
N

PUBLIC GARDENS.

To

THE MUNICIPAL COMMISSIONER.

SIR,

I have the honour to submit the Annual Report on the administration of the Municipal Gardens under my charge for the year 1918-19.

2. Mr. C. D. Mahaluxmivala, Superintendent, Municipal Gardens, having attained the age of 55 years, was ordered to retire from Municipal service from 16th April 1918 and I was appointed provisionally substantive Superintendent in his place from that date.

3. The following gardens were maintained during the year under report :—

(*a*) Victoria Gardens.
(*b*) Elphinstone Circle Garden.
(*c*) Falkland Road Garden.
(*d*) Northbrook Garden.
(*e*) Sir Cowasji Jehangir Garden at Mahim.
(*f*) Bhatia Baug Garden (Victoria Square).
(*g*) Dick's Tank Garden.
(*h*) Esplanade Bandstand Green.
(*i*) Chowpaty Bandstand.
(*j*) Flora and Wellington Fountains and the Queen's Statue.

4. The Victoria Square, known popularly as the Bhatia Baug, was allowed to remain in the same condition as before owing to reasons stated by the Commissioner in his letter No. 37670, dated the 22nd February 1917, to the Corporation.

5. The work of turning the Northbrook and Falkland Road Gardens into play grounds for children was much advanced during the year under report. All the old trees and shrubs were removed in both the gardens and the ground raised levelled and turfed over. Swings and parallel bars for children have already been provided at the Northbrook Garden where attractive and ornamental shade trees also will be planted along the side walks during the monsoon.

6. The number of visitors to the Victoria Gardens during the year under report was 1,558,334, showing an increase of 2,469 only as compared with the previous year. This small increase is not unsatisfactory taking into account the reservation of the gardens for women and children only on 14 Fridays during the year under report. This reservation however not proving a success was discontinued from 2nd August 1918 under orders of the Corporation.

7. My anticipations in regard to obtaining a sufficient supply of labour were greatly realised during the greater part of the year owing to the revised schedule increasing the pay of the mallees being sanctioned by the Corporation. A sufficient number of men was available but not of the intelligent or trained class of mallees.

8. The water supply in all the gardens during the year under report was never before so very deficient both in continuity and pressure owing to the failure of the last monsoon, but with what little that was fortunately available the gardens were kept up in their usual standard of neatness and order.

9. The grant for repairs to the roads was as usual utilized in tarring newly some of the roads and repairing others through the Executive Engineer's Department and departmentally also.

10. Good progress was made during the year under report towards completing the scheme of superficial drainage of the gardens. A grant of Rs. 20,000 was provided in the loan works budget and utilized for constructing drains in the upper half of the central avenue and the Zebra and larger Antelope Enclosures.

11. The smaller aquatic ponds and channels in the south-west corner of the garden, which were marked down since many years for filling in as an antimalaria measure, were filled in during the year under report, at a very small cost, from surplus earth obtained from

road repair and drainage excavations. It is proposed to utilize this reclaimed and the surrounding area as a recreation and playground for different sorts of games to make the garden more popular and attractive to visitors.

12. Most of the shrubberies were cut down, dug up and manured and some replanted during the year under report. Some of the lawns were also dug up and renovated after being given a top dressing of road scrappings and manure.

13. The newly designed flower-beds along the central avenue made a very good show of flowers in both the monsoon and cold weather. The *Zinnias* grew and flowered most vigorously and made a splendid show as in the previous year.

14. A small consignment of bulbs was obtained from Messrs. Sutton & Sons to grow as an experimental measure. The growers were not able to send all the varieties that were ordered, owing to the war, and those that were available were received rather too late in the season to be given a fair trial, still it is interesting to note that some of the cold weather varieties, *viz.*, *Narcissus*, *Ranunculus*, *Lillium candidum* or the Madonna Lily, and a few of the Irises flowered here for the first time.

15. A list of new plants added to the collection during the year under report is given in Appendix A.

16. The band performances were as usual given at the different Municipal Bandstands during the year under report. There were 16 performances at the Victoria Gardens against a similar number in the previous year, whilst at the Esplanade Bandstand there were 43 against 47 in the year before. At the Chowpatty Bandstand there were 15 performances against 9 in the previous year.

17. There were in all 7 performances with admission fees at the Victoria Gardens during the year under report against 10 in the previous year, and the total number of visitors and the receipts collected during these performances were 10,147 and Rs. 1,003-14-6, averaging 1,149 visitors and Rs. 143-6-7 per each performance, against 1,455 visitors and Rs. 143-8-10 respectively in the previous year.

18. Our best and grateful thanks are again due to Their Excellencies Lord and Lady Willingdon for their kindly allowing their band to play at the different Municipal Bandstands before their departure from Bombay, and also to Their Excellencies Sir George and Lady Lloyd for a similar favour. Altogether four performances were given of which two were at the Esplanade Bandstand and two at the Victoria Gardens and they were all largely attended and greatly appreciated by the public.

19. The special grant of Rs. 10,000 a year provided for improvement in the Zoological section of the garden was utilized during the year under report for the following alterations and additions:—

(*a*) Filling in the aquatic ponds mentioned in para. 11 above.

(*b*) Extension of the dens of the Tigers' Enclosure.

(*c*) Alterations in the roof of the Monkey House.

(*d*) Dividing the second Game Birds' Enclosure into smaller compartments.

(*e*) Providing a new railing for an additional compartment in the Deer Paddocks.

All these works were carried out through the Executive Engineer's Department. The area reclaimed by filling in the ponds will, if necessary, be available in future for the extension of the Zoo. The roof of the Monkey House, which was defectively constructed, had a series of five arches with hollows in between. This was highly detrimental to the health of the inmates of this house. Most of the animals suffered from Cramps and Rheumatism, and even Tuberculosis sometimes, owing to the walls of the house remaining very damp during the monsoon. This was due to percolation of water from the hollows of the arches. These arches are now altogether done away with and an ordinary tiled roof, lined with planks on the inside, has been provided instead. The Tigers' dens were too small to allow of the animals remaining there with comfort during long confinement in the heavy rains of the monsoon, or when they were isolated to prevent fighting with each other. The extended dens therefore will conduce greatly to the comfort of these animals. The division of the other Game Birds' enclosure into smaller compartments was necessary for reasons stated in para. 18 of last year's report.

20. The elephant and camel rides continued to be given and were well patronized by the public. The elephant however got very seriously ill with diarrhœa, followed by zerbad a very fatal disease amongst elephants, at the beginning of February. The animal's condition was highly dangerous for a week or so but fortunately she recovered under proper treatment and nursing. The animal has been in a very weak condition since and the rides therefore have had to be discontinued for the present. Altogether 7,560 adults and 12,781 children took advantage of it against 7,549 adults and 13,170 children during the year before. The total receipts were Rs. 1,349-2-6 showing a decrease of only Rs. 8-6-6 as compared with the previous year. The camel rides however showed a great increase in their number and receipts 1,272 adults and 2,716 children enjoying them during the year under report against 813 adults and 1,558 children in the past year, and the fees realised were Rs. 329-8-0 against Rs. 199-0-0 in the year before showing an increase of Rs. 130-8-0.

21. A list of additions to the Zoological Collection by purchase, exchange and present and the casualties among the animals by disease, accidents and injuries during the year under report are given in Appendix B. The principal gifts during the year were 1 Indian Gazelle by the Lady Superior, Parel Convent, and Mr. A. A. Baig, respectively; 2 Indian Sloth Bear Cubs by Mr. R. C. Thompson; 1 Indian Sloth Bear Cub by Mr. E. M. Kierander; 1 White-bellied Crow by Mr. J. A. Green-halgh; 1 Persian Gazelle by Mr. Suleman Abdul Wahed, J. P.; 2 pairs African Lions, one pair Tigers and one Tiger Cub by the Dungarpur State through Major D. M. Field, Political Agent, Rajputana; and Arabian Baboon by Mr. A. R. Brooker. Our best thanks are due to all the donors of these animals, and especially to the Dungarpur Durbar for their valuable gifts.

22. Amongst the animals born in the Gardens during the year were 1 Campbell's Monkey; 5 Rhea chicks; 1 Zebra; 2 Sambar Deer; 4 Indian Antelopes; 1 Wallaby; 1 Spotted Deer and 1 Nilgai. The most remarkable event amongst the above was the birth of a Zebra on the early morning of 30th August last. It is believed to be the first instance of a Zebra being bred in this country. The animal is a female and is growing up very well. The Rhea chicks were reared during the year more successfully than before, three of the four that were hatched being still alive and well. This was no doubt due to the unusually dry and rainless weather we had during the monsoon.

23. Trade in wild anima's continued to be slack owing to the war. The principal purchases were 5 pairs of Mandarin Ducks, 1 Australian Cassowary, 1 African lioness, an interesting collection of aquatic birds, such as Cranes, Storks, Flamingoes, Pelicans, Herons and Geese, &c. from Jaypore and a pair of Burmese Peafowls, a pair of Himalayan Bears, a pair of Thamine Deer, two pairs of Hog Deer and a pair of Wallaroo from the Victoria Memorial Park at Rangoon.

24. There were two exchange transactions during the year, *viz.*, with the Kurachi Zoo Gardens, and with the Taronga Park at Sydney, Australia, from where we received a nice collection of the smaller Australian Marsupials, peculiar to the fauna of that country, such as Phalangrs, Dasyures and Wombats, a pair of Bush Turkeys and some Australian Pigeons. The Wombats and Bush Turkeys were exhibited here for the first time. This latter exchange transaction was due to the personal visit paid to our garden in July 1917 by Mr. A. Sherbourne Le Souef, the Secretary of the Taronga Park Trust, who was deputed by the Government of New South Wales to visit the different gardens and parks in India and South Africa. It is expected when shipping facilities improve, to make further exchanges with this garden.

25. There was no endemic outbreak of Tuberculosis during the year under report except two sporadic cases amongst the smaller animals, *viz.*, an old Crown Pigeon and a Panda or Cat-bear dying from this disease, the latter animal being very susceptible to it in captivity.

26. There was fortunately no reappearance this year of Rinderpest amongst the Deer and Antelopes which carried away a lot of animals last year. A case each however of Anthrax and Septicaemia Hæmorrhagica occurred causing the death of a Leopard and a Samber respectively. All necessary precautions were taken to prevent both the diseases spreading amongst to other animals.

27. Amongst the deaths caused by other diseases were one Monaul Pheasant from Aspergillesis; one White Swan, two See Partridges, 1 Amherst Pheasant, 1 Mandarin Duck, 1 Red-billed Blue Magpie, 1 Silver Pheasant and a Gold Pheasant from Chicken Cholera; an Indian Sloth Bear Cub from Pneumonia; a Rhea from Sincope; 1 Panda or Cat-bear, 1 Lion, 1 Wallaroo and a Black-tailed Wallaby from Debility and old age: a Rednecked Wallaby from Liver disease; a Sambur Deer from Enlargement of Spleen; a Campbell Monkey from Enteritis; and Indian Sloth Bear cub from Dysentery; a Pelican from Trematoid

worms, a Malbrouk Monkey and two Annubis or Dogfaced Baboons from Paralysis; a Roseate Cockatoo, a Pelican, an Indian Antelope, a Four Horned Antelope, a Flamingo and other smaller mammals and birds from accidents and injuries received from other animals.

28. The post-mortem and bacteriological examination of dead animals was continued to be made by Major Liston, C. I. E., and his staff at the Parel Laboratory for which kind help our best and grateful thanks are due to them.

29. Our best thanks are also due to the Agents of the B. B. & C. I. and G. I. P. Railways for their favour in granting free passes as usual for the transport of all our animals and their attendants over their systems. The B. I. S. N. Co. were also kind enough to issue free passes for bringing animals for the garden from Karachi and Rangoon for which we are greatly indebted to them as without such co-operation of the Railway and Steamer Companies it would be well nigh impossible to obtain animals from long distances.

30. The Sir Cowasji Jehangir Garden at Mahim continued to be occupied with Health Camps as before.

31. The table below shows the Budget grants and actual expenditure on the various gardens during the year under report:—

Name of Garden.	Budget Grants.	Expenditure.	
	Rs. a. p.	Rs. a. p.	
		75,626 0 6	Actually spent.
		35,738 7 9	Liabilities incurred.
(a) Victoria Gardens	1,17,038 0 4	1,11,364 8 3	
		2,955 12 10	Actually spent.
		5,172 10 1	Liabilities incurred.
Do. New Works ...	8,795 5 3	8,128 6 11	
		9,689 3 0	Actually spent.
		2,819 2 0	Liabilities incurred.
(b) B. Miscellaneous Gardens, Bandstand, &c.	13,089 6 0	12,508 5 0	
Total Rs. ...	1,38,922 11 7	1,32,001 4 2	

I have the honour to be,

Sir,

Your most obedient servant,

JAMSHED M. DOCTOR,

Superintendent, Municipal Gardens.

APPENDIX A.

LIST OF PLANTS AND SEEDS ADDED TO THE COLLECTION IN 1918-19.

Names of Plants.	From whom received.
Trichillia Emetica	Presented by Mr. W. S. Millard.
Clerodendron splendens	
Daedalacanthus nervosium	
Platanthera (Habenaria) Susannæ	Presented by Rev. Father Blatter.
Eucalyptus traqueta	Raised from seeds presented by Taronga Zoological Park Trust, Sydney.
Acacia saligna	
„ leprosa	
Lagerstroemia Flos-Reginæ (dwarf variety) ...	In exchange from Byculla Club.
Pentstemon sp	In exchange from Sir Dorab Tata, Poona.
Gladiolus bulbs	
Lichens sp.	
Echiveria sp.	
Bambusa pygmæa	
Canna sp.	
Salvia splendens (White)	
Canna Lady Sanderson	
Tecoma grandiflora	
Stewartia Pseudo-Camellia	
Populus alba	
Platanus orientalis	
Pinus longifolia	In exchange from the Empress Gardens, Poona.
Cupressus torulosa	
„ glabra	
„ macrocarpa	
Furcræa Watsoniana	
Codiæum (Croton) Jamesii	
Ricinus communis red variety	
Hibiscus mutabilis	
Ipomæa Horsfalliæ	
Adenium obesum	
Melia sempervirens	
Zizyphus spina christi	
Dalbergia olivri	
Acacia saligna	
Schinus terebinthifolius	
Cassia acutifolia	
„ didymobotrya	
Acacia farnesiana	
Sapindus vitiensis	
Catalpa bignonioides	
Acacia leprosa	
Oenothera creuvis...	
Vitex Agnus-castus	
Hibiscus mutabilis	
Sparitum junceum	
Solanum verbascifolium	Raised from seeds received in exchange from the Director, Horticultural Section, Giza, Mondesieh, Egypt.
„ sculare	
Passiflora fœtida	
Landolphia (Eala) graines	
Cæsalpinia Bonducella	
Solanum torvum	
Sesbania aculeata	
Cassia tomentosa	
„ angustifolia	
„ bonariensis	
„ bicapsularis	
Moringa aptera	
Acacia Lahai	
Acacia spadicigera	
Erythræa edulis	
Ligustrum lucidum	
Solanum Warszewiczii	
Aristolochia elegans	
Ocimum minirdas...	
Clerodendron squamotum	Raised from seeds received in exchange from Mr. M. Buysman, Lawang, Java.
Sesbania Tripetii...	
Acacia sphærocephala	
Rosa Coquette des Blanches	Purchased from Messrs. M. Moonisawmy and Sons, Bangalore.
„ Frau-Karl Druschki	
„ Marveille de Lyon...	
Antigonon amabile	
Bougainvillea scarlet	
Dombeya natalensis	
Panax rotundus	

APPENDIX A—*contd.*

LIST OF PLANTS AND SEEDS ADDED TO THE COLLECTION IN 1918-19.

Names of Plants.	From whom received.
Agapanthus umbellatus	
Arum Lilis...	
Anthurium andreanum	
„ Bartonii	
„ Lucidum	
Spathiphyllum candidum	
Adiantum intermedium	
„ macrophyllum bipinnatum...	
„ Moorei	
„ Williamsii	
„ La Grandii	
„ Kerabœanum	
„ schizophyllum.	Purchased from Messrs. M. Moonisawmy and Sons, Bangalore.
„ Lawsonii	
Amaryllies	
Eucharis Mastersii	
Dactylis glomerata	
Pandanus Veitchii	
Calathia (Maranta) medio picta	
„ („) zebrina var. Binoti	
„ („) flavescens	
„ („) insignis	
„ („) stricta	
„ („) oxalis striata	
„ („) Baraquinii	
Honey suckle Nilgiri	
Eucalyptus citriodora	Purchased from Ahmedabad Palace Garden, Bhopal.
Hibiscus Lucien Linden...	
Jasminum azoricum	
Eucalyptus amygdalina	
„ acmeniodes	
„ Baileyana	
„ botryoides	
„ calophylla	
„ citriodora	
„ conica var. baueriana	
„ cerbera	
„ capitellata	
„ camphora	
„ dumosa	
„ Gunnii	
„ Guilfoyleana	
„ hemiphloia var. microcarpa	
„ microcorys	
„ melanophloia	
„ plancheniana	
„ robusta	
„ resinifera	
„ rostrata	
„ rubida	Raised from seeds purchased from Mr. Andrew Murphy, Woy Woy, N. S. W, Australia.
„ saligna	
„ sideroxylon rosea	
„ umbra	
„ siderophloia	
„ viminalis	
Acacia Decora	
Casuarina Cunninghamiana	
Syncarpia laurifolia	
Melaleuca styphelioides	
„ Leucodendron	
Tristania conferta	
Leptospermum liversidgei	
Elæocarpus cyaneus	
Callistris rhomboidea	
Melia dubia	
Sterculia diversifolia	
Acacia longifolia	
„ pycnantha	
Macrozamia spiralis	

JAMSHED M. DOCTOR,

Superintendent, Municipal Gardens.

APPENDIX B.

List of increase and decrease of animals in the Victoria Gardens Zoo during 1918-19.

A.—The following were added to the collection during the year under report :—

PRESENTED.

3	Four Horned Antelopes	Presented by Mr. Charandas Chaturbhaj.
2	Indian Sloth Bear cubs	„ „ „ R. C. Thomson.
1	Do. do. cub	„ „ „ E. M. Kierander
1	White-bellied Crow	„ „ „ J. A. Greenhalgh.
1	Four Horned Antelope	„ „ „ P. R. Tata.
1	Hanuman or Langur Monkey	„ „ „ Yar Mahomed Miya.
1	Persian Gazelle	„ „ „ Suleman Abdul Wahed, J. P.
1	Indian Gazelle	„ „ The Lady Superior, Parel Convent.
2	Pairs African Lions	„ „ The Dungarpur State through Major D. M. Field, Political Agent, Rajputana.
1	Pair Tigers	
1	Tiger cub	
1	Arabian Baboon	„ „ Mr. A. R. Brooker.
1	Four Horned Antelope	„ „ „ W. White.
1	Indian Gazelle	„ „ „ A. A. Baig.

BORN IN THE GARDENS.

1	Campbell's Monkey.	4	Indian Antelopes.
5	Rhea-chicks.	1	Wallaby.
1	Zebra.	1	Spotted Deer.
2	Sambur Deer.	1	Nilgai.

PURCHASED.

1	Austrian Cassowary.	7	Purple Herons.
10	Mandarin Ducks.	3	Black-headed Ibises.
1	African Lioness.	4	Spoonbills.
6	Black-necked Storks.	13	Grey Lag-geese.
6	Common Cranes.	4	White Storks.
4	Painted Storks.	2	Burmese Peafowls.
4	Pelicans.	2	Himalayan Bears.
12	Flamingoes.	2	Thamine Deer.
10	Barheaded Geese.	4	Hog Deer.
6	Red Shanks.	2	Wallaroos.

RECEIVED IN EXCHANGE.

1	Wild Boar	From the Kurachee Zoo.
4	Black Partridges	
2	Painted Storks	
2	Wombats	From the Taronga Zoological Park, Sydney, Australia.
2	Vulpine Opossums	
2	Ring-tail Opossums	
5	Spotted Dasyures	
2	Mound Building Turkeys	
2	Wonga Pigeons	
2	Bronze Winged Pigeons	

GIVEN IN EXCHANGE.

2	Indian Antelopes	To the Kurachee Zoo.
1	Spotted Deer	
4	Common Peafowls	

B.—The following were among those that died or were destroyed during the year under report :—

2	Sambur Deer.	1	Tigress.
1	Crowned Pigeon.	2	Common Cranes.
1	Indian Sloth Bear.	1	Lion.
2	„ „ „ cubs.	2	Mandarin Ducks.
1	Tragopan Pheasant.	1	Black-tailed Wallaby.
4	Panda or Cat bears.	3	Pelicans.
2	Persian Gazelles.	5	Four-horned Antelopes.
1	White Swan.	1	Himalayan Bear.
3	Leopards.	1	Hog Deer.
2	Red-necked Wallabies.	7	Flamingoes.

and other smaller mammals and birds.

JAMSHED M. DOCTOR,

Superintendent, Municipal Gardens.

VICTORIA AND ALBERT MUSEUM.

REPORT OF THE CURATOR AND SECRETARY, VICTORIA AND ALBERT MUSEUM, RECEIVED UNDER HIS No. C. M. 29, DATED 28TH OF APRIL 1919.

SIR,

I have the honour to submit the following Annual Report of the Victoria and Albert Museum for the year ending 31st March 1919.

No. of Visitors to the Museum.

The number of visitors to the Museum during the year under report was 954,483 against 883,914 for the year 1917-1918, thus giving an increase of 70,500 over the number of visitors for the previous year. The daily average attendance was 3,069 as compared with 2,824 of the past year. The Museum was open to the public for 311 days against 313 in the year 1917-1918.

Office.

Mr. Cecil L. Burns retired from the office of the Curator and Secretary of the Museum from the 1st of April 1918, and I was appointed to the post from the above date.

The Bombay War Museum.

At the request of the Chairman of the Bombay War Museum Committee, the Municipal Commissioner was pleased to authorise me to allow the Committee to house the collection of war exhibits in the Museum Building, and to place the services of the Museum Staff at their disposal for arranging them in the show cases. The work of collecting the specimens and arranging them was carried on for four months, when in the month of March last the Committee decided to remove the collection from the Museum for the purpose of holding an exhibition in the Freeman Thomas Hospital. The specimens exhibited were swords, bayonets, rifles, boxes containing charged cartridges, photographs and other exhibits of military and naval interest. The work done by the staff was favourably reviewed by the *Times of India* in the following words, "Of the assistance which the Committee has received from the authorities at the Victoria and Albert Museum it is impossible to speak too highly, they have co-operated with great enthusiasm, and have made stands for arms, and have put at the Committee's disposal all the show cases required."

Natural History.

The case to contain specimens of Himalayan Bears, reported to have been taken in hand in the last year's Annual Report was nearing completion, when it had to be dismantled to make room for exhibiting specimens of war trophies. The specimens of Bears will now be exhibited in another case, where the work of painting a suitable back ground and preparing artificial rocks and scenery is in hand.

Besides the case referred to, the three following cases containing specimens of Pheasants, Indian Water-Birds and Ratites were dismantled for the same purpose. The work of re-exhibiting these specimens has been taken in hand. Similarly the room on the ground floor of the Museum in which were exhibited specimens of Indian Crocodiles had to be cleared of its contents. The room is now used for exhibiting specimens of Blackwood carving done in Bombay in former times.

A skin of a large Bengal Tiger with the head mounted by Messrs. Rowland Ward of London, was presented to the Museum by His Highness the Maharaja Saheb Bahadur of Dungarpur State.

The carcasses of the following animals that died in the Victoria Garden, sent by the Superintendent were skinned and the skins cured and mounted :—

2 Panda or Cat Bears, 1 Himalayan Mounal Pheasant, 1 White Swan, 1 Ahmehurst's Pheasant, 1 Blossom headed Gull, 1 Red-billed blue Magpie, 1 Leopard cub, 1 Indian Antilope, 1 Tigress, 1 Bear Cat, 1 Lioness, 1 Painted Stork, 1 Rhea, 1 Four-horned Antilope and 1 Purple Heron.

With the sanction of the Municipal Commissioner, the specimens of snakes, fish, crustacia, insects and eggs of birds were handed over to the Curator of the Bombay Natural History Society's Museum, as these specimens were found to be uninteresting and unimportant to the class of visitors that visit the Museum. In all 303 glass jars containing the above specimens, 3 cabinets containing specimens of eggs and 19 wall cases containing specimens of insects were presented.

Old Bombay Room.

As reported last year, a descriptive catalogue of prints, photographs, and engravings relating to the past history of Bombay, was printed. The work of printing and illustrating it was entrusted to the *Times of India Press* and the copies are now offered on sale to the public at a nominal charge of Re 1 per copy. Out of the copies received, about 150 have been reserved with the sanction of the Municipal Commissioner for presentation to other Museums and public bodies. Upto now about 127 copies have been so distributed and 76 have been sold to the public.

During the year under report, 20 photographic views of old Bombay were purchased for the collection.

A large sized engraving depicting the ceremony of presentation of colours and clasps to the Bombay Fusiliers by Mrs. Col. Mignon at Poona on the 10th of February 1852, was purchased.

A proposal to collect together and preserve typical specimens of Blackwood carving done in Bombay during the latter part of the last century was sanctioned by the Municipal Commissioner and accordingly four settees, one wall table and one carved screen were repaired and thoroughly over-hauled at a cost of Rs. 1,000, and are now exhibited in the Museum.

Some time back Mr. Burns proposed to include in the collection of portraits for the old Bombay Room, photographs of some notable Indians, who figured prominently in the history of Bombay, but the work of carrying out the proposal had to be kept back due to pressure of more urgent work. During the year under report, I was able to take it up, and with the sanction of the Commissioner, I wrote officially to the heirs or representatives of these people, requesting them to send photographs to the Museum. In response to it, photographs of the undermentioned gentlemen have been received, and when framed, they will be put up on the walls in the Museum. My thanks are due to the ladies and gentlemen, who kindly complied with my above request.

Sir Jamsetji Jijibhoy (1st Baronet), the late Mr. Justice Budrudin Tyebji, the late Mr. Justice K. T. Telang, the late Sir Mangaldas Nathubhoy, the late Mr. Narayan Wasudev Dabholker, the late Mr. Morarji Goculdas, the late Mr. R. M. Sayani, the late Mr. Jaggonnath Shunkarseth, the late Mr. Goculdas Tejpal, the late Sir P. M. Metha, the late Dr. J. Gerson da Cunha, the late Mr. Dadabhoy Nowroji, the late Mr. J. N. Tata, Sir Cawasji Jehangir (1st Baronet), the late Sir Albert David Sassoon, the late Dr. Bhau Daji, and the late Mr. Framji Cawasji Banaji.

Industrial Section.

A specimen of old Beejapur embroidery of the 14th century was presented by Mr. Cecil. L. Burns.

A specimen of a watch chain made of cocoanut fibre was presented by Mr. M. T. Gupta. Two specimens of embroidered silks from Cutch, and one specimen of Patola silk from Pattan were purchased and added to the collection of Textiles.

Sixteen specimens of artistic silverware were purchased at a cost of Rs. 810 and these with the specimens already in the Museum will be exhibited in a large show case now in course of preparation.

I am of opinion that though much useful and interesting work has been done in this section of the Museum in past years, there is still room for further development. In order to carry this out, I propose to make the collection of exhibits more comprehensive than is the case at present dealing with the industries that are carried on in our Presidency, and by way of comparison including specimens of other similar industries that exist in other parts of the country. With this object in view, I have attempted to make two such cases at the Museum, one containing specimens of Plumbago and the articles made of it, and the other, containing specimens of Glass manufactured in the Bombay Presidency and other parts of the country.

Plumbago enters largely in the composition of crucibles and pencils, and specimens of the mineral in its crude form and also freed from impurities have been procured and exhibited. Two specimens of crucibles prepared at the Sir George Clark Technical Laboratory have been presented by the Superintendent of Pottery. Specimens of pencils manufactured at the Government Factory, Madras, together with exhibits and photographs showing the different processes in the course of their manufacture were presented by the Director of Industries, Madras, and these have been so arranged in the cases that they give an idea of the manner in which these articles are prepared. A brief descriptive label explaining how the articles are made, has been printed and put in the case for the information of the public.

The work of making the Glass Industry Case is in hand. Specimens of the raw materials employed in making glass have been secured and a few specimens of glass articles such as chimneys, globes, bangles, etc., made at Messrs. Oagle Glass Works in Karad (Dist. Satara). The Swadeshi Glass Manufacturing Company at Piplod (Rewakantha), and the Glass Factory at Kapadganj have been secured by presentation from the Managers of the respective factories A few models in clay showing how glass is manufactured in India and in Europe have been made. A brief descriptive label giving the history of the industry and explaining how some of the glass articles are made, is being printed for the case.

The War.

The War being now over, the interest that attached itself to the two models of land and naval battles waned, and it was decided with the Commissioner's permission to remove them, and utilise the cases for exhibiting industrial specimens. However the Museum will not be without any specimens which will help to recall to mind the part played by the Indian Regiments in the successful prosecution of the great war. The collection of figures, each representing a unit of an Indian Regiment has been completed, and has been arranged in a large show case. In all 124 figures of Indian Infantry soldiers and 44 Cavalry Regiments are represented, the models being made after the illustrations given in the book "Our armies in India."

The Library.

The usual list of books purchased in the year 1917-1918 was sent to the office of the Chief Accountant.

The following books were purchased during the year under report for the Museum Library:—

The Museum (M. T. Jackson), Istur Phakade (C. A. Kincaid), Sivaji, the Maratha (H. G. Rawlinson), History of the Parsees in two volumes (M. M. Murzban), Indian Paintings (P. Brown), Criminal Classes of the Madras Presidency, Criminal Classes of the United Provinces, Criminal Classes of the Bombay Presidency, Police and Crime in India (Sir E. C. Cox), Primitive Culture (E. B. Taylor), Rajput Paintings in two volumes (A. Coomarswamy), One Hundred Bombay Notes. History of the Marathas (C. A. Kincaid and R. B. D. B. Parasnis), Great Epic of India (W. Hopkins), Delhi 1857 (H. Norman), Vision of India (S. Low), Travels in the Moghul Empire (F. Bernier), Scientific American Encyclopedia of Formulas, Buddhist Gospel (A. Coomarswamy), Garden of the Moghuls (M. Villiers Stuart), Army of the Indian Moghuls (W. Irvine), and Times History of the War, Vol. XVII.

In conclusion, I beg to state that I am working practically on the lines, which have been laid down by Mr. Burns for improving and popularising the Museum.

I have the honour to be,

Sir,

Your most obedient servant,

ERNEST R. FERN,

Curator and Secretary.

No. D/S152 of 1919-20.

From

E. J. HALE, Esq.,

Storekeeper, Municipality.

To

The MUNICIPAL COMMISSIONER

for the City of Bombay.

Municipal Stores Office,

Bombay, 31*st May* 1919.

Sir,

I have the honour to submit the Annual Administration Report of the Stores Department for the year 1918-19.

Market rates ruled very high during the whole year and difficulty was experienced in obtaining articles imported from Home as manufacturers were not in a position to turn out work as in pre-war days and shipping difficulties still continued.

Owing to Government's action in taking over control of all cement factories in India all Indian cement for use by the Municipality was obtained through Government and not through contractors as hitherto.

On account of the difficulty experienced in getting Cast Iron scrap it was arranged to issue Municipal Scrap to casting contractors and tenders were invited accordingly. All available scrap being insufficient, some old obsolete C. I. pipes and fittings on books were broken and issued to casting contractors as scrap during the year with the sanction of the Corporation.

The vacant plot of land at Bellasis Bridge Pipe Depôt admeasuring 5,433 square yards was leased as usual for cultivation purposes for the four months ending 31st October 1918 for Rs. 360. The same amount was realised in the previous year.

Statements showing annual and special contracts entered into during the year as well as important quotations invited have been embodied herein as usual.

The annual verification of stores at Central Stores, and the two depots and the triennial verification of stores on line in charge of Water Works Department was commenced at the close of the year by an outsider appointed by the Commissioner. Applications were invited for the work by public advertisement. Mr. K. R. Vacha was selected for the post.

The Stores vocabulary prepared by Mr. Simkins was completed and printed and issued to the various departments during the year.

The work of preparing lists of standard samples is kept in abeyance owing to the difficulty of getting suitable samples due to war.

From appendix D showing the opening and closing balances and the purchases and issue during the year under report, it will be seen that as compared with the closing balances of 31st March 1919, there is a decrease under General Stores of Rs. 7,833-10-10.

The value of the Surplus and Obsolete Stores of the Water Works and Drainage Department is reduced to Rs. 517-9-6, as compared with the previous year.

An increase of Rs. 664-15-0 is shown in Line Suspense Stores in charge of different Inspectors of the Water Works Department on the 31st March 1919, as compared with the opening balance of 1918-19. The question of bringing, on Line Suspense Stores, articles found surplus in the different districts outside Bombay is not yet settled.

I have the honour to be,

Sir,

Your most obedient servant,

E. J. HALE,

Municipal Storekeeper.

APPENDIX A.

GENERAL CONTRACTS FOR 1918-19.

Schedule No.	Names of Articles.	Names of Contractors.
2	Axes, Pick, Shovels, Spades, etc.	Messrs. Hassanalli Adamji & Co.
4	Baskets, Bamboo	,, ,, ,,
5	,, Cane	Mr. T. H. Neterwalla & Co.
6	Belting	Messrs. John Fleming & Co.
7	Bins, Sanitary	,, Hassanalli Adamji & Co.
10	Brooms and Ribs, Goa	Mr. A. M. Kathawalla.
11	Brushes	Messrs. Hassanalli Adamji & Co.
13	Canvas	,, ,, ,,
14	Capes and Coats	,, Bhawoo Kashinath & Co.
15	Carriage Fittings and Harness	Mr. P. H. Wadia.
16	Charcoal and Firewood	Messrs. Hassanalli Adamji & Co.
17	Cloth, Dungri	,, ,, ,,
19	Crockery, Glassware and Lampware... ...	,, ,, ,,
20	Cutlery	,, ,, ,,
21	Electric Goods	,, ,, ,,
23	Globes, Glass Pine	,, ,, ,,
25	Grease and Oils	The Vacuum Oil Company.
26	Hardware	Messrs. Hassanalli Adamji & Co.
27	Leather Goods...	,, ,, ,,
28	Leather Hides, Country and Europe... ..	,, ,, ,,
29	Line, Coir	Mr. A. M. Kathawalla.
30	Locks, Brass and Iron	Messrs. Hassanalli Adamji & Co.
31	Metal	Mr. Framroz Bhikajee.
32	Miscellaneous Articles	,, ,,
33	Motor Accessories	The Dunlop Rubber Company.
34	Nails for Bullock Shoes, Pins, Shoes and Washers	Messrs. Hassanalli Adamji & Co.
35	Nails and Screws	,, ,, ,,
36	Nose Strings	,, ,, ,,
37	Nuts, Rivets and Washers	,, ,, ,,
38	Oil, Castor and Sweet	,, Manjee Hirjee & Co.
39	,, Cocoanut	,, Karmsi Manjee & Co.
40	,, Kerosine 125°	The Asiatic Petroleum Co.
40	,, ,, 150°	,, Standard Oil Company.
41	,, Linseed double boiled	Messrs. Manjee Hirjee & Co.
41	Turpentine	,, Wilkinson, Heywood & Clark, Ltd.
42	Oil, Lubricating	The Vacuum Oil Company.
43	Oils, Paint, Varnish, etc.	Messrs. Hasanalli Adamji & Co.
44	Packings	,, ,, ,,
44A	Paulin Canvas	,, ,, ,,
45	Paints	,, Wilkinson, Heywood & Clark, Ltd.
46	Pans and Pots, Earthen	Mr. P. H. Wadia.
47	Pitch and Tar	Messrs. Hassanalli Adamji & Co.
48	Plumbers' Stores	Mr. Abasbhai Abdulalli.
49	Rope, Coir and Rubber, Hand	,, A. M. Kathawalla.
50	,, Cotton	Messrs. Hassanali Adamji & Co.
51	,, Manilla	,, Uttamram & Co.
52	Rubber Goods...	,, Hassanalli Adamji & Co.
53	Salt, Soap and Soda	,, ,, ,,
54	Shafts, Wooden	,, Bhawoo Kashinath & Co.
55	Shipchandlers' Stores	,, Hassanalli Adamji & Co.
56	Steel, Cast	,, ,, ,,
58	Testers, Smoke	,, ,, ,,
59	Tools	,, ,, ,,
60	Tubes and Tyres for Motors	The Dunlop Rubber Company.

APPENDIX **A**—*concluded.*

Schedule No.	Names of Articles.	Names of Contractors.
62	Waste, Cotton	Messrs. Hassanalli Adamji & Co.
64	Yarn	„ „ „
Annual Special.		
1	Timber, Benteak, Calicut and Thikka logs ...	„ Karim Ayub & Co.
2	Iron Castings, General	Mr. Meheralli Hurjee.
3	„ Workshops	Messrs. Richardson & Cruddas.
4	Hoes or Powras	„ Chaganlal & Co.
5	Hose Canvas	„ Hassanalli Adamji & Co.
„	„	„ Turner, Hoare & Co.
6	Hose, Rubber	„ „ „
7	Iron and Steel	„ Chaganlal & Co.
„	„	„ Hassanalli Adamji & Co.
8	Umbrellas	„ „ „
9	Coats, Water-proof	„ Bhawoo Kashinath & Co.
10	Clothing for Hospitals	„ Hassanally Adamji & Co.
1	Clothing to Peons and others	„ Bhawoo Kashinath & Co.
12	Blankets or Cumblees...	„ Tippana Laxuman & Co.

E. J. HALE,
Storekeeper.

APPENDIX **B.**

Special Contracts for 1918-19.

No.	Names of Articles.	Names of Contractors.	Amount.
			Rs. a. p.
1	Cultivation at B. B. Pipe Depot.	Mr. Rukhad Premjee	360 0 0
2	Closeable Gratings for half size water entrance	Messrs. Richardson and Cruddas	7,056 0 0
3	Closeable Gratings for full and half size water entrance ...	„ „ „ ...	33,516 0 0
4	Stoneware Pipes and Fittings ...	The General Stores Trading Co. .	3,554 6 0
5	Izal Powder	Messrs. Thomson & Taylor ...	14,100 0 0
6	Bass Broom Ribs	„ John Fleming & Co. ...	1,920 0 0
7	Solid Band Rubber Tyres ...	The Dunlop Rubber Co. ...	1,530 0 0
8	S. W. Pipes, 12″ × 2 ft. ...	Mr. A. R. Subedar	1,721 4 0

E. J. HALE,
Storekeeper.

APPENDIX C.

IMPORTANT QUOTATIONS INVITED DURING 1918-19.

Serial No.	Names of Articles.	Quantity.
1	Cast Iron Purdah	
2	Leather, patent, Europe, block	
3	Cast Iron sluice valves, 4"	
4	Peto and Redfords accumulator	
5	Iron sheets, plain, galvanized and steel mild, flat and square, &c.	
6	Teak wood Moulmein logs	
7	Hose, canvas, ordinary, 1½"	
8	Belting, camel hair, 5" × 4-ply	
9	Cast Iron hinged covers, 9" × 9"	
10	Bhendy wood logs	
11	Timber	
12	Stoneware pipes, 4" × 2 ft.	
13	Hose, canvas, India Rubber lined	
14	Bolts and nuts, hexagonal and square, &c.	
15	Screws, iron and files steel	
16	Bolts and nuts of sizes	
17	Files, steel, of sizes	
18	Chambers for block mould	
19	Steel, mild, plates	
20	Bolts and nuts of sizes	
21	Timber	
22	Rope, flexible, steel galvanized	
23	Bhendy wood logs	
24	Bolts and nuts	
25	Steel, mild, angles	
26	Harness, horse, single, Europe	
27	Coats, waterproof, for Nurses	
28	Steel, mild, square and round	
29	„ springs	
30	„ „	
31	„ mild, flat, &c.	
32	Cast Iron sluice valves, 3"	
33	Buckets, galvanized, country	
34	Steel, mild bars and corrugated iron sheets	
35	Eye bolts for hydrants	
36	Rope, steel, flexible, galvanized	
37	Boxes, tin, block	
38	Paint powder, vermillion	
39	Head pieces, galvanized, ventilating	
40	Steel, mild bars, &c.	
41	„ „ plates	
42	„ „ bars, of sizes	
43	„ „ „	
44	„ springs	
45	Draw sheets and bandages	
46	Oil, heavy, engine	
47	Ghamelas, wrought iron	
48	Paint, mixed, white lead and chocolate	
49	Steel, mild bars of sizes	
50	Files of sizes	
51	Oil, motor, A grade	
52	Jungle wood plank, &c.	
53	Cast Iron soil pipes	
54	Steel, mild, flat, &c.	
55	Stoves of four burners	
56	Bolts and nuts of sizes	

APPENDIX **C**—*continued.*

Serial No.	Names of Articles.	Quantity.
57	Files, steel, of sizes	
58	Side lamps, tail lamps, and bulbs, &c.	
59	Steel, mild, round	
60	,, ,, bars, &c.	
61	Boots and woollen putties	
62	Oil, mineral, cleaning...	
63	Rakes, W. I.	
64	Junction, S. W. saddles, T. 9″ × 6″	
65	Steel, mild, plates, &c.	
66	Lamps, Kitsons	
67	Steel, mild, plates and bars	
68	Card boards	
69	Pipe, galvanized 1¼″	
70	Bolts and nuts, of sizes	
71	Plug, sparking, oleo.	
72	C. I. sluice valves	
73	Sand moulding, yellow, and black	
74	Steel, mild, bars and springs...	
75	Oil cans, tin	
76	Plug sparking, lodge	
77	Boxes, tin, block	
78	Files, of sizes	
79	Steel, mild, bars of sizes	
80	Harness, horse, English	
81	Copper pipes	
82	Coats, water proof, of sizes	
83	C. I. soil pipes 4″	
84	Head pieces and offsets	
85	Lawn mowers	
86	Boss oil stove	
87	Winches for Kitson lamp	
88	Dealwood planks	
89	Bhendy wood logs	
90	Steel, mild, bars, of sizes	
91	Belting patent 15″ × 3-ply	
92	Paint, mixed, white lead	
93	Plug, sparking, oleo magneto type, No. 7	
94	Tubes, boiler, steel, mild, 2¼″	
95	C I. Rain water pipes, 3″	
96	Files, steel, of sizes	
97	Oil, motor, grade A	
98	Bolts and nuts, of sizes	
99	Mantles, globes, for pearl lamps	
100	Bleaching powder	
101	Steel, cast tool, air hardening	
102	Eternit sheet	
103	Paint mixed chocolate	
104	Jungle wood, scantlings	
105	Union Jack flags	
106	Buckets, galvd. 14″	
107	Steel, mild, plates and bars	
108	,, ,, bars, of sizes	
109	German silver Basin...	
110	Sewan wood logs	
111	Jungle wood and Deal wood planks	
112	India Rubber circular valves	
113	Cloth pieces, dyed indigo for screens	
114	S. W. Pipes and fittings	
115	Bhendy wood logs	
116	Bolts and nuts, square neck, snop heads	
117	Tubes, boiler, steel, mild, 2¼″ dia.	
118	Dealwood planks	

APPENDIX C—*concluded.*

Serial No.	Names of Articles.	Quantity.
119	Solignum paint, Brown	
120	S. W. Junction, 6″ × 6″	
121	Sewan wood logs	
122	Bolts and nuts, of sizes	
123	Copper tubes, &c.	
124	Aluminium scrap	
125	Copper sheet pipes and junctions	
126	Steel, mild, Tee & Angles	
127	C. I. soil pipes, 4″	
128	Bolts and nuts, square head and neck	
129	Steel for carriage spring	
130	Thread, hemp, twine, balls	
131	Bhendy wood logs	
132	Jungle wood scantlings and Deal wood planks	
133	Buckets, galvd. 10″	
134	Blankets, cotton, red 4′ × 6½′	
135	Steel for carriage springs	
136	S. W. Gully traps with full bend, 9″ × 6″	
137	Flexible steel wire rope	
138	Packing Karmel	
139	Pig iron, soft	
140	Steel, mild bars, and springs	
141	Oil, motor, A grade	
142	Steel, mild, bars	
143	Baskets, cane, for office papers, 18″	
144	Blankets, cotton, red	
145	Cans, watering, garden	
146	Yarn, wool and white metal	
147	Steel, mild, round, square	
148	Bolts and nuts and files of sizes	
149	Pipes, galvd. 1″ to 2″	
150	Steel spring for carriage	
151	Bass sheets, ⅜″ thick	
152	Buckets, galvd. 12″ & 13″	
153	Bulb for motor horn	
154	C. I. soil pipes, 4″	
155	Steel, mild, bars, steel springs, and steel, cast, miners	
156	Tallow, Country, Blacking and matches	
157	Blankets, Cotton, red, 4′ × 6½′	
158	Bolts and nuts, square	
159	Steel, mild, flat and carriage spring	
160	Deal wood planks	
161	White metal	
162	Paint, mixed, white zinc	
163	Valve balls, self closing, ½″	
164	Boxes, tin, block	
165	Steel spring and steel, mild, bars	
166	Teak wood logs	
167	Zinc sheet, perforated	
168	Bolts and nuts, square neck and head	
169	C. I. suction frame button holes	
170	Pig iron, soft	
171	Zinc sheet, plain	
172	Belting patent, 5″ × 5:ply	
173	Bolts and nuts, of sizes	
174	Stop cocks and tapbibs	
175	Mango wood boards and Benteak scantlings	
176	Netting wire, galvd.	
177	Pipes, W. I., Standard gas thread	
178	Bolts and nuts and files, &c.	
179	Paints, mixed, white lead	

E. J. HALE,
Storekeeper, Municipality.

APPENDIX D.

Particulars.	General Stores.	Surplus and Obsolete Stores.	Line Suspense Account.	Total.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Value of Stores on hand on 1st April 1918	5,43,538 9 3	3,089 8 4	1,01,396 12 4	6,48,024 13 11
Value of Stores receipts, including transfers, during 1918-19	9,96,985 3 6	Nil.	879 0 0	9,97,864 3 6
Total ...	15,40,523 12 9	3,089 8 4	1,02,275 12 4	16,45,889 1 5
Less—				
Value of Stores issues, including transfers, during 1918-19	10,05,167 1 11	517 9 6	214 1 0	10,05,898 12 5
Balance ...	5,35,356 10 10	2,571 14 10	1,02,061 11 4	6,39,990 5 0
Add—				
Discrepancies adjusted as per Clause 29 of the Stores and Stores Audit Manual against Rate Adjustment Account.	348 3 7	Nil.	Nil.	348 3 7
Value of Stores on hand on the 31st March 1919	5,35,704 14 5	2,571 14 10	1,02,061 11 4	6,40,338 8 7

E. J. HALE,
Storekeeper.

LICENSE DEPARTMENT.

No. L. A./89 of 1919-1920.

To

P. W. MONIE, Esq., M.A., I.C.S.,

Municipal Commissioner for the City of Bombay.

Bombay Municipality.
20*th May* 1919.

Sir,

I have the honour to submit my Annual Report on the working of the License Department for the year 1918-19.

During the year under report 12,158 licenses were issued, the total revenue collected being Rs. 1,30,321-4-0 *vide* attached statements marked A and B.

The revenue collected during the last 3 years is compared below:—

Official year.	No. of licenses issued.	Revenue from licenses.
		Rs. a. p.
1916-17	10,184	1,13,858 0 0
1917-18	12,430	1,29,484 6 0
1918-19	12,158	1,30,321 4 0

Municipal control was not required to be exercised over plots of land occupied by Government for stacking materials necessary in connection with the war, license fees in respect of such plots amounting to Rs. 6,300 were therefore foregone.

The fees remaining to be recovered amounted to Rs. 1,488-4-0.

Miscellaneous receipts amounted to Rs. 244-4-0.

In 31 cases refund of license fees amounting to Rs. 593 was allowed.

The following trades and commodities were brought under Municipal control for the first time :—

Schedule M. Part	Trade or Commodity.	Remarks.
II	Keeping celluloid, celluloid goods over 4 cwts. and cinematograph films over 20 lbs.	
II	Keeping of Bidi leaves over 4 cwts.	
II	Paper stored for sale as waste-paper over 4 cwts.	
IV	Manufacturing oil other than petroleum.	
III	Keeping of bamboos.	
IV	Manufacturing Dynamite, Blasting powder, Gunpowder and Fire Works.	
IV	Manufacturing matches	License fees in respect of these two items are under the consideration of the Municipal Corporation.
II	Keeping of ghee over 4 cwts.	

Total fines inflicted by the Presidency Magistrates in 1,010 prosecutions conducted during the year against persons carrying on trades subject to licenses, without licenses and for infringing license conditions amounted to Rs. 20,181-0-0.

The fines inflicted by the Presidency Magistrates during the last 3 years are shown below:—

Official year.	No of cases.	Total amount of fines inflicted.
		Rs. a. p.
1916-17	1,207	19,714 4 0
1917-18	885	15,951 4 0
1918-19	1,010	20,181 0 0

Some difficulty was experienced in dealing with a number of unlicensed temporary bullock stables, as these undrained and insanitary temporary structures were moved from place to place in order to avoid the expense of erecting permanent stables in accordance with the Municipal By-laws.

In the northern part of the City some unlicensed temporary stables were tolerated, there being no accommodation available in regular licensed stables.

One appeal was made to the High Court in case No. 418/1918 by Bhawoo Yesoo who was repeatedly fined by the 4th Presidency Magistrate for keeping a large number of bullocks without a license in insanitary cudjen sheds. The appeal was dismissed.

As the result of complaints received from time to time, Section 394 (1) (d) (ii) of the Municipal Act has had to be resorted to in 21 cases in order to stop certain trades which proved to be a source of nuisance or danger.

The staff of this Department has been strengthened from 1st April 1919 by the addition of an Assistant, 2 License Inspectors and 2 clerks.

I have the honour to be,
Sir,
Your most obedient servant,
H. WALD,
Superintendent of Licenses.

A.

Yearly total of License fees recovered during 1918-1919

No. of Licenses.	Nature of Trade.	License fees. Rs.	a.
38	Aerated Water (manufacturing)	817	8
10	Ashes	125	0
177	Bakeries...	3,595	0
44	Bidi Leaves	105	0
7	Bricks (manufacturing) (hand-made)	46	4
2	Candles (do.) (do.)	50	0
12	Carbide of Calcium (retail)	65	0
10	Do. do. (wholesale)	257	8
1	Catgut	15	0
596	Charcoal...	5,401	4
151	Chemical preparations	2,223	12
12	Cinematograph films	100	0
219	Cloths in Indigo and other colours dyeing (hand power)	1,719	0
13	Do. do. do. (mechanical power) ...	332	8
297	Coal and Coke	3,078	8
64	Cocoanut fibre, Flax, Hemp and Jute...	789	0
38	Cotton (cleaning)	655	0
226	Cotton Seed, Refuse or Waste	3,690	12
13	Cow-dung Cakes (manufacturing)	176	0
103	Dammer, Tar or Pitch	1,245	0
2	Dynamite	52	8
1,653	Eating Houses	11,755	0
31	Fat and Tallow	442	8
6	Fins (dried)	90	0
23	Fish (do.)	306	4
148	Fireworks (retail)	347	8
101	Do. (wholesale)	747	8
177	Firewood (retail)	338	0
716	Do. (wholesale)	8,099	0
6	Gas (manufacturing)	180	0
4,896	Carried over ...	46,845	4

Yearly total of License fees recovered during 1918-1919—*concluded.*

No. of Licenses.	Nature of Trade.	License fees. Rs.	a.
4,896	Brought forward ...	46,845	4
6	Ghee (manufacturing)	65	0
197	Grain (parching)	282	0
353	Gunny bags	1,851	12
45	Gunpowder (retail)	217	8
1	Do. (wholesale)	30	0
210	Hay, Straw and Grass	3,220	8
30	Hides and Skins (dried)...	450	0
29	Do. raw (keeping)	955	0
38	Do. (tanneries)	3,550	0
9	Horns and Hoofs	140	0
39	Lime for burning (lime kiln)	1,687	8
1,043	Matches (retail)	1,372	12
81	Do. (wholesale)	6,164	8
96	Do. (Bengal lights) (retail)	150	0
183	Metals (casting)	2,612	8
63	Methylated spirit	610	0
960	Noisy Trades	2,208	4
716	Oil (keeping)	10,781	4
1	Oil (manufacturing)	1	4
2	Paper (manufacturing)	30	0
21	Paper (stored as waste paper)...	105	0
111	Permits under Section 390	2,775	0
52	Petroleum (non-dongerous, under Petroleum Act) (kerosine oil) (retail)	164	8
81	Do. (non-dangerous, under Petroleum Act) (kerosine oil) (wholesale)	2,177	8
58	Do. (dangerous, under Petroleum Act)	168	4
17	Pottery (manufacturing)	51	0
38	Rags	536	4
46	Saltpetre	223	12
2	Smelteries	24	0
32	Soap (manufacturing)	722	8
23	Sugar Refineries	575	0
55	Stables for Horses	3,003	12
127	Do. Milch Cattle	10,906	4
102	Do. Bullocks	1,916	4
12	Do. other four-footed animals	12	0
1,971	Timber	20,326	4
125	Turpentine (retail)	615	0
45	Do. (wholesale)	663	12
40	Whistles (steam)	400	0
43	Wool	860	0
.....	Licenses transferred	138	0
2	Special licenses under Section 394 (1) (d) (ii)	2	0
12,001	Total Rs. ...	1,29,591	0

B

Statement showing the amount of License fees for 1917-1918 recovered in 1918-1919.

No. of Licenses issued.	Nature of Trade.	License fees.
		Rs. a.
3	Charcoal...	7 4
1	Chemicals	20 0
1	Coal and Coke	2 8
1	Cocoanut Fibre, Flax, Hemp and Jute	6 4
19	Eating Houses	135 0
3	Fireworks (retail)	15 0
42	Firewood (wholesale)	137 4
1	Gunny bags	2 0
2	Hay, Straw and Grass	2 8
2	Matches (retail)...	3 8
1	Do. (wholesale)	37 8
1	Do. (Bengal lights) (retail)	1 0
2	Metals (casting)	7 8
5	Noisy Trades	5 0
8	Oil (keeping)	42 8
2	Permits under Section 390	50 0
1	Soap (manufacturing)	6 4
2	Stables for Bullocks	3 12
1	Do. other four-footed animals	1 0
3	Turpentine (retail)	10 0
55	Timber	219 8
1	Wool	10 0
.....	Licenses transferred	5 0
157	Total Rs. ...	730 4

Summary of Income for 1918-1919.

No. of Licenses issued.	Official year during which collection was made.	License fees.	Remarks.
		Rs. a.	
157	Income for 1917-18 during 1918-19	730 4	
12,001	Income for 1918-19 collected from 1st April 1918 to 31st March 1919	1,29,591 0	
12,158	Total ...	1,30,321 4	

H. WALD,
Superintendent of Licenses.

MARKETS.

To

THE MUNICIPAL COMMISSIONER.

SIR,

I have the honour to submit the Annual Report of the Markets and Slaughter Houses for the year 1918-19.

The total receipts from the Markets and Slaughter Houses during the year under report, amounted to Rs. 7,28,671-12-3 against Rs. 6,67,521-15-5 in the previous year, showing an increase of Rs. 61,149-12-10.

I continued to serve on the Food Grain Committee under the Controller of Prices and furnished all the necessary information to enable the Committee to settle the prices of Grain, Ghee, Sugar, Firewood, Charcoal, Kerosine Oil, etc., to which publicity was given and rendered every possible help in ascertaining the prevailing wholesale and retail prices of different articles.

References from the Supply and Transport Officer and from different Regimental Officers continued as regards quotation of certain articles and the required information was supplied after making careful inquiries.

The Corporation by its Resolution No. 1824 of 13th June 1918, sanctioned an additional Budget grant of Rs. 5,000 and an advance of Rs. 25,000 from surplus cash balance to finance the scheme for opening Municipal grain shops for the sale of necessaries of life to the poor. Accordingly during the year under report, the following shops were opened and maintained by the Municipality :—

Mazagon,	Babula Tank.
Kamatipura.	Chandanwadi.
Fergusson Road,	Elphinstone Road.
Erskine Road.	Parbhadevi Road.
Lalwadi.	DeLisle Road.
Tardeo Flats.	Love Grove.

In addition to these shops there were two travelling carts. Grain worth Rs. 46,115-1-11 was sold at the cost price. This measure has to a certain extent given relief to the poor.

As many of the Municipal employes—particularly the labour staff—could not take advantage of the grain shops, a system of coupons was introduced. Two kinds of coupon books containing 16 coupons representing one and two annas each were issued on application through Heads of Departments and the cost amounting to Rs. 2,932-4-0 was recovered subsequently from the pay of the employés.

The total receipts of Rs. 7,28,671-12-3 shown in para 2 are detailed in the following Statements A. to E.

A

Statement of Stall Rents and Squatters' Fees collected departmentally during the year under report contrasted with those in the previous year:—

Names of the Markets.	Total number of stalls.	Average number of stalls vacant.	Stall-rents.	Squatters' fees collected departmentally.	Total.
			Rs. a. p.	Rs. a. p.	Rs. a. p.
Colaba Market	55	37	349 14 0	113 14 0	463 12 0
Fort Market	252	73	6,934 14 0	76 14 0	7,011 12 0
A. C. Fruit and Vegetable Market ...	560	4	80,124 5 0	344 0 0	80,468 5 0
Do. Fish and Mutton Market ...	119	25	10,229 12 0	.....	10,229 12 0
Do. Mutton (New) Market	68	14	3,298 11 0	.....	3,298 11 0
Do. Beef Market	81	1	11,925 0 0	.....	11,925 0 0
Godowns	27	.....	7,580 0 0	.....	7,580 0 0
Fowl Rooms	29	.....	3,576 0 0	.....	3,576 0 0
Bird Shops	18	1	1,964 15 0	.....	1,964 15 0
Erskine Road Fruit and Vegetable Market (Old) ...	448	38	33,881 2 0	1,357 12 0	35,238 14 0
Do. do. (New) ...	140	45	7,148 1 0	.....	7,148 1 0
Do. Mutton Market ...	100	16	9,418 12 0	.....	9,418 12 0
Bhuleshwar Market	176	8	15,648 7 0	2,112 8 0	17,760 15 0
Pedder Market	40	2	1,666 0 0	.....	1,666 0 0
Kamatipura Market	48	.....	2,803 10 0	.....	2,803 10 0
Pork Market	2	.....	100 0 0	.....	100 0 0
DeLisle Road Sheep Market	50	4	6,969 13 0	.....	6,969 13 0
Fergusson Road Market	30	1	1,750 0 0	1,289 8 0	3,039 8 0
Parbhadevi Road Market	25	1	876 13 0	1,203 8 0	2,080 5 0
Elphinstone Road Market	45	11	1,451 8 0	327 0 0	1,778 8 0
Total ...	2,313	281	2,07,697 9 0	6,825 0 0	2,14,522 9 0
Total in 1917-1918 ...	2,335	387	1,99,791 15 0	10,578 5 0	2,10,370 4 0

The above statement shows an increase of Rs. 4,152-5-0 in stall rents and squatters' fees.

B

Statement of Squatters' and Scale Fees recovered from the Contractors during the year under report as compared with those in the previous year:—

Particulars.		1918-19.	1917-18.
		Rs. a. p.	Rs. a. p.
Colaba Market	Fish	1,550 0 0	1,350 0 0
	Vegt.	256 14 0	
Fort Market		2,200 0 0	2,225 0 0
A. C. Beef and Fish Markets		10,700 0 0	9,600 0 0
Erskine Road Fish Market		28,300 0 0	24,000 0 0
Pedder Market		2,250 0 0	2,050 0 0
Kamatipura Market		1,800 0 0	1,800 0 0
Fergusson Road Market	Fish	2,100 0 0	2,100 0 0
	Vegt.	1,305 2 0	
Parbhadevi Road Market	Fish	1,350 0 0	1,300 0 0
	Vegt.	1,206 10 0	
Elphinstone Road Market	Fish	775 0 0	700 0 0
	Vegt.	394 0 0	
Scale Fees at the A. C. Market compound		8,000 0 0	7,200 0 0
Grand Total ...	Fish	51,025 0 0	52,325 0 0
	Vegt.	3,162 10 0	
	Scale	8,000 0 0	
		62,187 10 0	52,325 0 0

When the Markets rights were put up to auction for the year under report, the bidders advanced their bids as usual with the result, that the total amount realized was Rs. 9,862-10-0 more than the previous year. This shows that the business in the Markets was steady.

C

The following statement shows the Fair Ground Rent and Feeding Fees at Bandra during the year under report, as compared with the previous year :—

	1918-19.			1917-18.			Increase.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Fair Ground Rent and Feeding Fees...	1,06,600	0	0	1,03,600	0	0	3,000	0	0

The above statement shows an increase of Rs. 3,000-0-0. This is due to the fact that for the last three years the importation of animals to Bandra was considerably large to meet the requirements of the Supply & Transport Department, the War Hospitals and the shipping in general. This led to very keen competition amongst the bidders when the right was put up to auction with the result that the bid went up to Rs. 1,06,600. The following is the comparative statement showing the number of animals so imported and the number rejected out of them as unfit for slaughter :—

Year.	Animals brought to the Fair Ground.			Animals rejected.		
	Buffaloes.	Horned Cattle.	Sheep and Goats.	Buffaloes.	Horned Cattle.	Sheep and Goats.
1918-19 ...	10,898	88,903	956,147	8	1,437	23,979
1917-18 ...	9,633	72,099	871,404	2	1,059	23,595

D

Statement of Slaughter Fees recovered during the year under report as compared with the previous year :—

	1918-19.			1917-18.			Increase.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Slaughter Fees ...	3,16,780	14	0	2,72,334	15	0	44,445	15	0

The above statement shows an increase of Rs. 44,445-15-0. This is due to a considerably large number of animals having been slaughtered, or removed from Bandra during the year. The following statement shows the total number of animals of each description slaughtered or otherwise disposed of as compared with those in the previous year :—

Description.	1918-19.		1917-18.	
	Number.	Amount of Slaughter fees.	Number.	Amount of Slaughter fees.
		Rs. a. p.		Rs. a. p.
Buffaloes	11,001	1,10,010 0 0	9,542	95,420 0 0
Do. (private slaughter)	2	20 0 0	1	10 0 0
Cows, bullocks and calves	84,749	63,561 12 0	67,476	50.607 0 0
Sheep and goats (for Bombay)	7,73,171	96,646 6 0	6,95,987	86,998 6 0
Do. (for Mahim and Bandra)	63,184	3,949 0 0	54,621	3,413 13 0
Pigs slaughtered at Arthur Road Slaughter House	4,977	4,977 0 0	4,291	4,291 0 0
Piglings do. do. do.	71	17 12 0	58	14 8 0
Pigs (private slaughter)	34	68 0 0	52	104 0 0
Piglings (do.)	114	28 8 0	153	38 4 0
Live horned cattle removed to Bombay	2,476	12 380 0 0	1,932	9,660 0 0
Live sheep and goats removed to Bombay	24,509	12,254 8 0	20,788	10,394 0 0
Permits issued for private slaughter of sheep	38	19 0 0	34	17 0 0
Live sheep and goats removed by the DeLisle Road Sheep Market Fadkaries...	25,698	12,849 0 0	22,734	11,367 0 0
Total ...	9,90,024	3,16,780 14 0	8,77,669	2,72,334 15 0

E

Miscellaneous Receipts.

The Minor Receipts under the head "Miscellaneous" amounted to Rs. 28,580-11-3. The details are as under :—

	Rs.	a.	p.
License fees	15,255	0	0
Fees for verifying weights and measures	680	6	6
For the right of removing blood (from the contractor)	8,000	0	0
Ground rent	264	0	0
Chawl rent	2,904	0	0
Price current	109	11	0
For the right of removing dead animals (from the contractor) ...	475	0	0
Rent from Pedder Market Chawl	209	7	3
Miscellaneous	75	14	6
Fees for issuing duplicate copies of petition and permits ...	607	4	0
Total ...	28,580	11	3

In the following statement is shown the financial results of the working of each market during the year under report, that is gross receipts and expenditure of each market and the percentage on the original cost of the market building. The percentage on the total income and expenditure of all the markets comes to 8·87 per cent. which is very satisfactory.

Statement showing the Financial Results of the Municipal Markets during the year 1918-19 :—

Names of Markets.	Original Cost including subsequent addition.	Additions, if any, made during the year.	Total Cost.	Gross Receipts.	Expenditure.	Net Receipts.	Percentage on the Cost.	Remarks.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs.	
Colaba Market	93,393 0 0	....	93,393 0 0	2,270 10 0	2,119 10 6	150 15 6	·16	
Fort do.	1,22,600 0 0	....	1,22,600 0 0	9,211 12 0	4,824 12 8	4,386 15 4	3·57	
Crawford Market	7,17,949 15 8	....	7,17 949 15 8	1,59,742 11 0	41,842 7 8	88,400 3 4	12·31	
Erskine Road Market	5,74,727 5 6	....	5,74,727 5 6	80,105 11 0	15,437 3 6	64,668 7 6	11·25	
Bhuleshwar do.	3,67,613 1 9	....	3,67,613 1 9	17,760 15 0	3,731 1 0	14,029 14 0	3·81	
Pedder do.	52,630 0 0	....	52,630 0 0	3,916 0 0	2,705 11 3	1,210 4 9	2·29	
Pork do.	5,500 0 0	....	5,500 0 0	100 0 0	587 10 4	*Loss* 487 10 4	*Loss* 8·85	
DeLisle Road Sheep Market ..	25,000 0 0	....	25,000 0 0	6,989 13 0	3,824 1 8	3,145 11 4	12·58	
Fergusson Road do.	22,669 0 0	....	22,669 0 0	6,444 10 0	2,122 15 10	4,321 10 2	19·06	
Parbhadevi Road do.	18,894 15 1	....	18,894 15 1	4,633 15 0	1,987 9 9	2,649 5 3	1·02	
Elphinstone Road do.	29,266 15 4	....	29,266 15 4	2,947 8 0	2,8.8 2 9	99 5 3	·33	
Kamatipura do.	50,691 0 0	....	50,691 0 0	4,603 10 0	2,459 10 11	2,143 15 1	4·22	
Total ..	20,80,935 5 4	....	20,80,935 5 4	2,68,716 3 0	83,991 1 10	1,85,206 11 6	....	
					Deduct Loss ..	487 10 4		
					Net Receipts ..	1,84,719 1 2		

The fines inflicted by the Presidency Magistrates for the infringement of the provisions of the Municipal Act and the Bye-laws pertaining to the Markets, during the year under report, amounted to Rs. 1,681-3-0 against Rs. 1,764-0-0 in the previous year. This total amount includes fines of Rs. 1,655-2-0 for the importation of contraband meat (Section 412 (1)), the balance of Rs. 26-1-0 being for infringing other sections of the Act.

Steps were taken, as usual, to destroy articles of food exposed for sale in the different markets that were found unwholesome. The following table shows the quantity of the various articles destroyed during the year under report :—

Meat (Bandra and Bombay)	26,170	lbs.
Fish	231,371	„
Fruit	101,373	„
Vegetable	29,719	„
Sweetmeat	313	„
Total ...	388,946	lbs.

The quantity of contraband meat seized and destroyed during the year under report was 8,583 lbs. against 7,708 lbs. in the previous year.

The supplies of mutton, beef, fruit, vegetable, &c., were as usual up to the mark.

No improvements have been effected in the Market and Slaughter Houses during the year under report. The removal of offal by carts from the Slaughter Houses was discontinued and now removed in a wagon by rail to Dadar and thence on by the Katchra train to Deonar. This arrangement has been working satisfactorily.

My staff worked satisfactorily during the year.

I have the honour to be,

Sir,

Your most obedient servant,

L. W. MICHAEL,

Superintendent of Markets.

EDUCATIONAL.

REPORT OF THE SCHOOLS COMMITTEE FORWARDED BY THE COMMITTEE'S SECRETARY UNDER HIS No. 7648, DATED 25TH SEPTEMBER 1919.

ADMINISTRATION REPORT OF THE SCHOOLS COMMITTEE FOR 1918-1919.

I. The Committee.

1. The undermentioned gentlemen were the members of the Schools Committee at the commencement of the year under review:—

Sir Chimanlal H. Setalvad, Kt., B.A., LL.B., J.P. (*Chairman*).

Members.

The Hon'ble Sir Dinsha Edalji Wacha, Kt., J.P.

N. V. Mandlik, Esq., B.A., LL.B. J.P.

Dr. Jehangir J. Cursetji, M.D.

Ramchandra Bhaskar Mantri, Esq. J.P.

Dr. Nadirshaw H. E. Sukhia, L.M. & S., L.V.Sc., F.R.S.I. (London), J.P.

Dr. Moreshwar Chintaman Javle, J.P.

Mirza Ali Mohammed Khan, Esq., M.A., LL.B., J.P.

Hiralal Dayabhai Nanavati, Esq., B.A., LL.B.

F. A. M. H. Vincent, Esq., M.V.O., J.P.

Ramkrishna Shrikrishna Navalkar, Esq., B.A., LL.B.

Dr. Abdul Satar Ayub Gaya, L. M. & S.

(elected on 4th April 1918 in place of the Hon. Sir Ibrahim Rahimtoola, Kt., who resigned on his appointment as a member of the Executive Council of the Bombay Government)

2. The office of the Chairman of the Committee was held throughout the year by Sir Chimanlal H. Setalvad, who received the honour of Knigthood in the course of the year and was thereupon by a Special Resolution congratulated by the Committee. The four most senior members of the Committee, who retired under Section 39 (3) of the City of Bombay Municipal Act, 1888, at the end of the calendar year 1918, were (1) Dr. Jehangir J. Cursetji, (2) Mr. Ramchandra Bhaskar Mantri, (3) Dr. Nadirshaw H. E. Sukhia, L. M. & S., &c., and (4) Dr. Moreshwar Chintaman Javle. They were all re-appointed by the Corporation. Out of the remaining eight members, Mr. F. A. M. H. Vincent, taking long leave to go out of India, relinquished his membership of the Committee. In accepting his resignation the Committee placed on record its high appreciation of his valuable services to the Committee and the great interest he always took in its affairs. The Corporation elected Dr. Dinshaw Bomanji Pestanji Master to be Mr. Vincent's successor on the Committee. In addition to the Ordinary Monthly Meetings, the Committee held 8 Special Meetings. It also referred several questions to Sub-committees, out of which special mention deserves to be made of the Subcommittee for inspecting school premises and that for revision of the graded salaries of teachers, etc., which held respectively 5 and 4 meetings and made recommendations of great value.

3. The office of the Committee's Secretary continued to be held by Mr. D. G. Padhye, M.A., who was, however, on privilege leave from 4th June 1918 to 28th July 1918, Mr. A. R. Bhaji, the senior Superintendent of Municipal Schools, being appointed to act for him during the period. A new clerk was added to the office establishment of the Committee and the graded salaries of the entire staff revised and reorganized.

II. General Progress and Summary.

4. The year under review was for several reasons a remarkable one, and may, in one sense, be regarded to mark a new epoch in the history of Primary Education in the City of Bombay. Mention was made in the last year's report of a detailed and comprehensive scheme for sustained and systematic progress, leading definitely to Free and Compulsory Education within 10 years, which the Committee had prepared and which the Bombay Corporation had, with general approval, forwarded to Government, with the request that the Government be pleased to make a substantial contribution to the enormous increase in the expenditure involved in the scheme. It was estimated that the expenditure would rise under the programme sketched out, by a lakh and quarter rupees per year in geometrical progression, reaching the sum of Rs. 24 lakhs, in the year of compulsion, ten years hence. With changed circumstances the actuals are likely to exceed very much these estimates. The Government made a very hearty and liberal response to the Corporation's request. They proposed under their letter No. 3150, dated 29th November 1918, that the Corporation should continue to bear the whole of the cost of Primary Education in the City upto the limit of the net budgetted expenditure for 1917-18 (Rs. 6,58,175-8-4) and that Government and the Corporation should from 1918-19, share equally, from year to year, all expenditure over and above that amount. The Corporation accepted this generous offer by their Resolution No. 621 of 5th December 1918 and that arrangement is to be now taken as complete and final. Government also propose to give to the Corporation by fresh legislation powers to introduce into the City Free and Compulsory Primary Education for boys or for girls or for both, throughout the City, either simultaneously or by wards or by sections of the City, as may be suitable. This legislation will complete all the arrangements that are necessary for the attainment of the final goal, which the Schools Committee now considers, is likely to come considerably earlier than under the original ten years' programme. Rapid expansion and steady and continuous preparation for the introduction of compulsion is one aim constantly borne in mind by the Schools Committee. Efficiency is another goal never lost sight of. The Bombay Municipal Schools seem to be already ahead of sister institutions of the kind in the country in several respects. "Admirable" and "most satisfactory" were the terms applied to some of them, it may be passingly mentioned, by three educational experts from outside who visited them in the course of the year, namely, Mr. M. P. West, Educational Inspector, Bengal, specially deputed by Government to study the working of Primary Schools here and Messrs. Y. Ogawa and S. Ogawa of the Japanese Educational Department. This superiority the Schools Committee wishes to retain and further develop. It hopes that the facts and figures given in the succeeding paras will show that in spite of the peculiarly adverse circumstances of the year under review, namely, 1918-19, which indeed led to one set-back of a temporary character, progress and development all along the lines have once more marked the operations of the department under its control and that the outlook for the future is bright and hopeful.

5. From the point of view of future developments and the preparation of an adequate machinery for the expansion and improvement of education, prominent mention may well be made of the final settling in the course of the year of the important question of placing on a satisfactory basis the pays and prospects of the teachers and other persons serving in the Schools Committee's department. The scales of salaries obtaining were fixed in 1909 and prices had abnormally risen since then. On the recommendations of the Committee the Corporation sanctioned a liberal war allowance now ranging for teachers and clerks from Rs. 15 to Rs. 20 per mensem, but that gave only temporary relief. Recognising the need for a radical rehauling, the Committee appointed a sub-committee that went thoroughly into the question and recommended a scheme under which the scales of salaries of all classes of teachers were thoroughly revised and provision made for a local training and improvement of the status and prospects even of Untrained Teachers. On the Committee's recommendations the Corporation adopted the new scheme and sanctioned its being given effect to from 1st April 1919 retrospectively to this extent that salaries were given from that date as per the new scale and as if it had been in existence *ab initio*. Appendix "A" gives the old and the new scales of salaries. It will be seen that the increase in salaries ranges from 20 to 30 per cent. for Trained Teachers and Special Teachers and gives a new ray of hope to untrained ones. This is all very satisfactory so far as it goes. The Schools Committee only hopes that the Corporation will give the finishing stroke to this act of grace by early disposing of favourably the long pending question of the admission of the Schools Committee's establishment to the benefits of the Municipal Pension Fund.

6. Prominent mention may also be made, owing to their uniqueness, of the activities during the year of the two branches of their own, formed by the Bombay Municipal Schools Children, of the Bombay Presidency War & Relief Fund. These child-members number 2,419. In addition to Rs. 2,705 subscribed for a War Loan Prize Fund, the members paid through the General Secretary, Rs. 1,253 for the benefit of the Lady Willingdon Home for disabled soldiers. They also held on 29th April 1918, a large gathering of their own in the spacious compound of the Lord Harris Municipal School building, at which a number of

exhibitions in Music and recitations and drill and gymnastics were given, and light refreshments fittingly terminated the proceedings of a day which served to materially foster a healthy *esprit de corps* among the children. These Members also held, and held very successfully, a more ambitious gathering for competitive sports, but only mention can be made thereof in this report as the gathering having been held in April 1919 belongs properly to 1919-20.

7. Of similar character were the Armistice Celebrations that took place in every Municipal School on the 27th November 1918. Their Excellencies Lord and Lady Willingdon paid visits to five Municipal Schools (Girgaum Marathi Boys' and Girls', S. S. Bengalee Gujerathi Girls' and Lord Harris Marathi Boys' and Girls' Schools) during the celebrations, and were entertained with music and drill exhibitions. It may also be mentioned that it was through the Secretary of the Committee and its office staff that the Bombay Armistice Celebration Committee arranged to have the Armistice celebrated and sweets distributed to the children of all kinds of schools in Bombay, more than 500 in number, the Lord Harris School forming the centre of the operations for this purpose.

8. The solidarity and organized efficiency of the Municipal Schools, scattered though they are from Worlee Koliwada and Shivdi on the north to Colaba and Walkeshwar points on the south, stood well the test of the several calamities, which befell the city during the year under review. First came the small-pox epidemic of April and May. Then came the influenza epidemics of June-July and September-November 1918, which raised the total daily mortality in the city to a figure unknown in the worst days of the plague. Lastly came the Cholera epidemic of January-February and the almost synchronous strikes of mill hands and consequent disturbances that made most of the streets in the North of the City insecure, specially for the little children of schools. Special measures had necessarily to be adopted to meet these crises. The schools were closed for three to four weeks in September 1918 when the influenza epidemic was at its height. On their re-opening specially manufactured quinine pills were distributed amongst them for use as prophylactics by the teachers and the children. In the days of Cholera, infected premises were at once vacated and disinfected before re-occupation and each school was supplied with Chlorogen for sterilizing drinking water. In the days of the mill strikes special measures were adopted for the safety of the Girls' Schools. The point to note is that excepting the short period for which, as mentioned before, the schools were closed, all of them continued working well and efficiently throughout the year in spite of the great ordeals through which the City passed. The only adverse effect was a little diminution in the number of children on the rolls: but that as explained later on, was only a temporary arrest of the usual growth, which has already been fully restored.

9. Twenty-two new Municipal Schools, including one taken over from a private agency, unable to conduct it, were opened during the year, bringing the total number of Municipal Schools to 233. The details of the new schools were as follows:—

Kinds of Schools.	Marathi.	Gujerathi.	Urdu.	Total.
Boys' Day Schools	1	2	3	6
Girls' do.	4	1	7	12
Free Mill do.	2	...	...	2
Nirashrit (Depressed Classes) Day School	1	...	...	1
Night School	1	...	...	1
Total ...	9	3	10	22

The large number of new Girls' Schools opened specially on the Urdu side is to be noted with special satisfaction. It may be noted that the nucleus for new Girls' Schools is always the girls attending the Boys' School in the quarter As soon as this number rises sufficiently the girls are separated from the boys and a new independent school formed of them. The last mentioned four schools were all intended to promote education among the mill-hands and among the working and the depressed classes, and they are meeting with considerable success.

10. The total actual expenditure and receipts of the year amounted to Rs. 8,53,437 and Rs. 8,83,348, respectively, the Municipal funds and the fees collected contributing Rs. 8,36,600 and Rs. 43,870 towards the latter amount. The corresponding figures for the previous year were Rs. 6,95,243; Rs. 6,90,070; Rs. 6,44,000 and Rs. 43,386, respectively.

It may be mentioned here that to this year properly belongs a further expenditure of Rs. 83,403, which sum represents an additional war allowance sanctioned retrospectively from 1st September 1918 and paid in 1919-20. The allowance was fixed formerly at Rs. 2 per mensem for peons and sepoys and ranged from Rs. 5 to Rs. 7 per mensem for teachers. These amounts were raised by Rs. 2 per mensem in the first case and Rs. 10 per mensem in the second.

11. The number of children attending Municipal Schools underwent during the year strange fluctuations chiefly under the combined operation of the abnormal conditions brought on by the war and the quadruple calamities through which the City passed in the course of the year under review. The total on the rolls on 31st March 1917 was 23,987. It rose abnormally to 28,377 on 31st March 1918, which seems to have been the period, when the adventitious growth in the population of Bombay brought on by the war reached its maximum. The rise of 4,390 children in one year was more than double the ordinary annual increase and was almost bound to produce a reaction. The overgrown number was reduced by 2,245 children in April, 1,553 out of them having left school on passing the highest, *i.e.*, the Public IVth Standard Primary School Examination, of which the results began to be given from last year in March instead of December or January as in previous years. The two influenza epidemics followed immediately and these caused a further fall of 2,000 children. The lowest figures were reached in June (24,664) and November (24,923). After fluctuations they came to 26,832 on 31st March 1919 as against the corresponding figure of 28,377 of the previous year. Though lower than last year's figure, yet this figure of 26,832 was substantially higher than the 23,987 of 31st March 1917. Besides, the monthly average on the rolls showed no fall, being 26,066 for the year under review as against 25,103 for the previous year. The set back was thus clearly a partial and a temporary one and may rightly be described as an arrest of the usual growth, brought on mainly by the epidemic and strikes of the year. It is to be noted that there is already complete rally. The numbers have again gone up. They had reached 28,498 at the time of writing this report (August 1919) and the rate of this upward march is steady and strong.

12. Under the careful supervision of the three Superintendents and the Assistant Superintendent, the general efficiency and orderly working of all the three kinds of institutions under the Committee's control (Marathi, Gujerathi and Urdu) were maintained at a high level. The Superintendent conducted the annual examinations of all the schools, either themselves or under their immediate supervision, and they were also associated with the Government Deputy Educational Inspector and his Assistants in conducting the Public Vernacular Fourth Standard Examination of the City. The results of the examinations of the year were in all cases satisfactory. Thus 1,553 out of 2,019 children sent up or 70·7 per cent. came out successful at the Fourth standard examination and 20 out of 28, i.e., 71 per cent. at the Vernacular Final Examination. Exactly the same number as the latter, i.e., 20 out of 28 passed at the Elementary First Grade Drawing Examination, for which only the most advanced of our schools can send candidates. For the 20 successful candidates in the subject a grant or Rs. 413 was obtained from Government.

13. Various measures were adopted in the course of the year with a view to ensure increased efficiency in the schools. Two Lower Primary Schools were made ordinary Upper Primary ones. Higher Standard Classes were added to the Chinchpoogli Marathi Boys' and the Dadar and the South Girgaum Marathi Girls' Schools, which it had been resolved in the previous year to raise to the status of full Primary Schools. Peons were given to half a dozen Boys' Schools where the number of the girls showed a steady tendency to rise. The unit for giving an additional teacher was lowered for Girls' Schools from 30 to 25. The necessity of paying particular attention to sanitation was specially impressed upon the minds of the Head Teachers, and in addition to the exceptional expenditure owing to the epidemics the monthly contingency grants of the schools were increased by Rs. 138 per mensem.

14. Regarding the scholarships the Committee gives as special encouragement for the education of girls and of backward classes, five new scholarships of Rs. 4 each per mensem were sanctioned in the course of the year for the Fourth Standard Boys of the Gujarathi Nirashrit Schools and two of similar value for the Kamathipura Marathi Nirashrit School. The value of 6 Marathi Girls' School scholarships was raised by Rs. 3 per mensem each. The total was brought to 67 scholarships of the aggregate value of Rs. 208 per mensem. To those have to be added the Government Middle School scholarships, the total expenditure under the head coming to Rs. 2,785. Prizes of the value of Rs. 5,719 were awarded to the children from the School Fund and of the value of Rs. 680 from the income of the Trust Funds held for the purpose by the Committee.

15. No addition was made during the year to the school buildings owned by the Municipality itself. The ten lakhs scheme of erecting Municipal School buildings at joint

Government and Municipal expenditure is practically in abeyance. Owing to the war conditions, it has become very difficult to secure premises for schools except at high rent. Still the work of improving the location of schools has not been given up. Leaving aside the new schools opened, additional accommodation was provided for 16 old schools, and 18 schools were removed to better premises. School gardening on such scale as is possible was specially encouraged. It is the Girls' School Head Mistresses who seem to have taken to such gardening, as to æsthetics in general, with particular zest. Improvement in equipment and conveniences and in embellishments of all kinds continued to claim special attention. Rs. 28,771 were spent during the year in supplying new furniture, charts, pictures, magazines, books and other educational requisites, useful for the boys as well as the teachers.

16. An addition of 96 persons was made during the year to the ranks of the ordinary teachers, for the new and the old schools together, the total being brought to 1,163. The strength of the special teachers also was increased. Two new teachers each for Music, Drill, Drawing, Knitting and Sewing and a half timer for the latter subject were sanctioned. Two English lady teachers for the higher classes of the girls' schools were also added. The total number of the Special Teachers at the end of the year was 59.

17. The training of teachers and improvement in the proportion of trained teachers in the employment of the Committee continued to receive careful attention. Five teachers on full pay (3 Gujerathi and 2 Urdu) and 73 ordinary stipendiaries were maintained by the Committee at the Ahmedabad and the Poona Training Colleges for Males and Females. The amount of the stipends was raised from Rs. 10 per mensem to Rs. 12 per mensem besides Rs. 2 per mensem as war allowance. The Gujerathi Training Class for Males and the Urdu Training Classes for Males and Females, which the Committee maintains in Bombay, helped 3 lady teachers to pass the qualifying test, 6 male teachers to pass the Vernacular Final, 6 the 1st year Training examination and 6 the Entrance examination of the Training Colleges. Special facilities were given to lady teachers of Bombay Municipal Schools attending the local Seva Sadan and the Vanita Vishram morning and evening Training Classes for females, for the former of which the Committee has lent free the use of the premises of one of its best-located Marathi Schools. During the year 26 stipendiaries returned to service here with Training Certificates. So many as 67 teachers in service in Bombay obtained *de novo* or higher Training certificates on passing the necessary examinations as "outsiders." A considerable number of trained teachers from outside was also taken in the Committee's employment. In the result, at the end of the year there were in the Committee's service 544 Trained teachers out of 1,163, as against 459 out of 1,067 at the end of the previous year, an increase from 43 to 47 per cent.

18. Rs. 450 was the amount representing the annual promotions to the Untrained teachers given under the old scale from January 1919. The increase of the war allowance by Rs. 10 per head and the introduction of the new scale of salaries with effect from the end of the year has already been mentioned in para. 5.

19. The education of the poorer and backward classes, of girls and of Mahomedans have claimed particular attention. Including the new schools opened during the year, as mentioned in para. 9, there were at the end of the year 17 Nirashrit or depressed class schools, 2 mill-hand schools and 6 ordinary Night Schools, with 1,855, 168 and 214 pupils, respectively, on the rolls. All these three kinds of schools are entirely free schools. Slates and writing materials are also supplied *gratis* to the pupils of the Nirashrit and the mill-hands schools. The rates of fees at the girls' schools are everywhere half of those charged for boys. An elastic system of free studentships, varying in accordance with the needs of the different localities, ensures that in no Municipal school is a poor boy refused admission for inability to pay his fees.

20. The year under review was the second year of the three years' experimental Medical Examination of the school children, inaugurated in March 1917, with its special features of (1) re-examination of children specially marked, (2) intimations of the ailments, etc., discovered to the parents and guardians, and (3) the provision of special cards for presentation for treatment at the Municipal Dispensaries. The Medical Inspector and Inspectress visited 14 Girls' and 16 Boys' Schools in the year for the first examination of all children, and 44 Girls' and 43 Boys' schools for the re-examination of marked cases and all new admissions, examined in all 9,338 children and found 6,465 children to have some defect or ailment. Intimations were sent to the parents, etc., of 4,128 children. Of these, 2,525 replied, 1,556 desiring treatment at the Municipal dispensaries. Cards detailing the symptoms were supplied in all the latter cases. The year's experiences showed that the medical inspection of school children was being more and more welcomed and that the opposition which had been shown in some sections of the Moslem community was fast disappearing.

21. The policy of giving increased grants to Aided Schools and extending a helping hand to private agencies of a philanthropic nature engaged in educational work was continued. The total sum paid as grants in the year under review was Rs. 85,373-11-0 for 163 schools as against Rs. 70,282 for 156 schools in the previous year. The number of pupils in

the 163 schools was 16,181 as against 15,907 in the 156 schools. Permission was given to 24 private Night Schools and kindred institutions to use *gratis* Municipal school premises and furniture, bringing the total number of institutions so helped to 42, with about 1,500 pupils taking benefit thereof.

III.—Municipal Schools and Attendance.

22. The following table compares the total number of Municipal Schools of all descriptions and the pupils attending thereat for the past two years. The total increase in the year was 22 schools consisting of 12 Girls' Schools (4 Marathi, 1 Gujerathi and 7 Urdu) and 6 Boys' Schools (1 Marathi, 2 Gujerathi and 3 Urdu), 1 Marathi Nirashrit, 1 Marathi Night and 2 Marathi Mill-hand Boys' Schools.

It has to be remarked that whilst the Marathi and the Gujerathi Schools showed a decline of number, the Urdu Schools showed a slight increase. This was partly the result of the new Girls' Schools opened and partly of the Mahomedan community being least affected by one of the calamities of the year, namely, the Mill-strikes :—

Classes of Schools.	Municipal.			
	1918-19.		1917-18.	
	Schools.	Pupils.	Schools.	Pupils.
Marathi.				
Day Schools—				
Middle Schools	3	324	3	319
Primary for boys	66	9,844	62	10,931
Do. for girls	35	3,706	31	3,596
Total ...	104	13,874	96	14,876
Night Schools	2	63	1	33
Total of Marathi Schools ...	106	13,937	97	14,909
Gujerathi.				
Day Schools –				
Middle Schools	1	73	1	92
Primary for boys	35	3,641	33	4,299
Do. for girls	22	2,218	21	2,582
Total ...	58	5,932	55	6,973
Night Schools	1	21	1	16
Total of Gujerathi Schools ...	59	5,953	56	6,989
Urdu.				
Day Schools—				
Primary for boys	50	5,223	47	5,389
Do. for girls	14	1,568	7	961
Total ...	64	6,791	54	6,350
Night Schools	4	151	4	129
Total of Urdu Schools ...	68	6,942	58	6,479
Grand Total of Marathi, Gujerati and Urdu Schools ...	233	26,832	211	28,377

23. The total of 26,832 pupils, shown above, was the number on the rolls on 31st March 1919. The average monthly number of pupils on the rolls for 1918-19 was 26,066 as against 25,103 for 1917-18. The total of the Boys' Schools was 162 and of the Girls' Schools 71 and of their pupils 19,340 and 7,492, respectively. Of these 4 Boys' Schools were Anglo-Vernacular Schools, and 4 Boys' and 4 Girls' Schools full primary ones, English being also taught in the latter.

Of the 19,340 pupils of the Boys' Schools 1,930 were girls and of the 7,492 pupils of the Girls' Schools 150 were boys.

IV.—Finance.

24. The opening balance of the School Fund was Rs. 14,154-13-4. The total receipts amounted to Rs. 8,83,348-12-8 as against Rs. 6,90,070-12-0 for the previous year. The contribution from the general Municipal Fund for the year was Rs. 8,36,600 (Rs. 7,55,000 regular contribution and Rs. 81,600 additional contribution for war allowance) as against Rs. 6,44,000 for the previous year. The income from fees rose from Rs. 43,386 to Rs. 43,870-13-0. The Trust Funds and other sources yielded Rs. 2,877-15-8. The total expenditure for the year was Rs. 8,55,437 being Rs. 1,58,194 in excess of the previous year. The increase was chiefly due to (1) the employment of 96 additional teachers, (2) the securing of improved accommodation for schools, (3) the opening of 22 new schools, (4) equipments of the existing schools and (5) increase in grants given to Aided Schools, etc. The year closed with a balance of Rs. 44,066-2-5. The average cost per pupil including the cost of the supervising establishment came to 28·6, as against 22 of the previous year, the rise being the result of the expenses under War allowance and increases in rents and general rise in the prices of the articles of school equipment. The figure of 28·6 was made up of Rs. 17·2 for teaching, Rs. 7·3 for house-rent and Rs. 4·1 miscellaneous.

V.—Teachers.

25. The following table shows the total number of ordinary teachers in the different kinds of Municipal Schools for the year under review and the previous year. The trained and untrained teachers are also shown separately :—

Figures for the year 1918-19.

Class of Teachers.	Number of Teachers.								
	Trained.			Untrained.			Total.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Marathi	232	89	321	196	73	269	428	162	590
Gujerathi	104	73	177	67	38	105	171	111	282
Urdu	46	...	46	179	66	245	225	66	291
Total ...	382	162	544	442	177	619	824	339	1,163
Figures for 1917-18.									
Marathi	214	76	290	197	58	255	411	134	545
Gujerathi	83	42	125	78	66	144	161	108	269
Urdu	44	...	44	153	56	209	197	56	253
Total ...	341	118	459	428	180	608	769	298	1,067

26. The increase in the number of teachers during the year was 96. It was due to the opening of new schools, the growth in the pupils attending old schools and the demands of efficiency elsewhere. Twelve full time teachers and 1 half-timer were added during the year to the Special Teachers staff whose total at the end of the year stood as follows :—

Drawing Teachers	12
Drill	10
Music	10
Knitting	5
Sewing Mistresses	14
English Lady Teachers	8
Total ...	59

27. To the above have to be added 7 teachers of the 4 Teachers Training Classes and 106 peons and hamals. The total number of persons of superior and inferior service employed in the Bombay Municipal Schools thus comes to 1,335.

VI.—Inspection and Supervision.

28. Messrs. A. R. Bhaiji, B.A., H. G. Anjaria, M.A., L.LB., and K. B. Padgaokar, B.A., continued to hold the offices of the Superintendents of the Urdu, the Gujerathi and the Marathi Schools, respectively. Mr. B. R. Manerikar, B.A., held the office of Assistant Superintendent, Marathi Schools. Mr. Bhaiji was appointed to act as Secretary of the Committee from 4th June to 27th July 1918, during the absence on privilege leave of Mr. D. G. Padhye, the Secretary, and Shaik Ahmed Shaik Amir, Headmaster, Chhatrisarang Urdu School, acted as Superintendent. Mr. Anjaria was on leave for 2 months from 15th April 1918 and Mr. Trimbaklal M. Trivedi, Headmaster, Bhuleshwar Anglo-Vernacular School, acted for him. The number of visits paid by these gentlemen were. Mr. Bhaiji 205, Shaik Ahmed 93, Mr. Anjaria 313, Mr. Trimbaklal 21, Mr. Padgaokar 246 and Mr. Manerikar 364. These gentlemen's work of examinations has been previously mentioned. All of them showed commendable zeal and activity in the discharge of their duties.

VII.—Teachers, Deaths, Retirements, etc.

29. The deaths amongst the teachers in the year were 24 and amongst the peons, etc., 6, about half of which may be attributed to the epidemics of the year. Of these, special mention deserves to be made of Bai Vijayaluxmi Chhabildas, Headmistress, Keeka Street Gujrathi Girls' School, Mariambi Kadir, Headmistress, Madanpura Urdu Girls' School, Mr. N. M. Beri, Headmaster, Nagpada Marathi School, L. S. Tendulkar, Headmaster, Seven Roads Marathi School and Mathurabai Sinde and Gangubai Vaidya, 3rd year trained lady teachers of great promise. Amongst those who retired after good service were Messrs. Karunashunkar Pragji and K. Y. Nipunage, Headmaster of the Bhatbazar Gujerathi and 1st Assistant, Nagdevi Marathi Schools, respectively.

Mention may here be made of the appointment by Government of one of the Bombay Municipal School teachers Mr. Ranchhodji B. Desai as Assistant Deputy Educational Inspector Kaira, S. D., permanently, and of Mr. K. B. Nene temporarily as Assistant Deputy Educational Inspector, Bombay.

VIII.—Medical Inspection.

30. Dr. G. V. Kher, L.M.&S., the Medical Inspector, and Dr. V. D. Afinwala, L.M.&S. his assistant examined school children as follows :

(*a*) 1,211 pupils of 16 Boys' Schools visited for the first time.

(*b*) 2,437 new admissions and 1,440 cases marked for re-examination, in 45 Boys' Schools, visited for the second time.

Out of the 1,440 re-examined cases, 853 appeared to be improving. Letters of advice were sent to the guardians of those who showed no improvement. Out of the 3,648 children examined afresh in the year 29 per cent. were discovered to have defect of teeth or to have eye diseases. About 20 per cent seem to be suffering from malnutrition or defects of throat. About 10 per cent. had defects of nose or vision or skin diseases. The total of those who were found to have defects of one kind or another was 2,383. Intimations were sent to the parents or guardians of 1,398 children out of these 2,383. Replies were sent by 981,340 going in for private treatment and 641 desiring treatment at the Municipal dispensaries. Descriptive cards were given to them all.

31. Dr. (Miss) Gulbai M. Doctor, L.M.&S., Medical Inspectress, and Miss Taratai Rajapurkar her assistant, examined school children as follows :—

(*a*) 966 pupils of 14 Girls' Schools visited for the first time.

(*b*) 1,920 new admissions and 1,364 cases marked for re-examination in 44 Girls' Schools, visited for the second time.

About 33 per cent. of the children re-examined appeared to have improved, others to have continued in the same condition and a few gone worse. Amongst the newly examined children diseases of teeth, and of throat, claimed 40 per cent., Malnutrition and external eye-diseases 30 to 35 per cent. defective lungs 17 per cent. and defective vision, diseases of the nose, enlarged spleen or lymphatic glands each about 8 per cent. In all 2,148 intimations were sent by Dr. Gulbai to parents, out of which 1,224 received replies. Cards for treatment at the Municipal dispensaries were given in 504 cases.

The inspecting officers observe that the Mahomedans do not seem to take much interest in the medical inspection, though there is now none of the active opposition that was formerly manifest : The other communities seem to be appreciating it to a considerable extent.

The Schools Committee's Office,
Bombay, 25th August 1919.

D. G. PADHYE,
Secretary, Schools Committee.

Appendix A.

Revised scales of salaries of teachers, &c., in force from 1st April 1919, compared with the old scales :—

N.B.—The salaries under the new scale are exclusive of War Allowance.

Class of Teachers and Qualifications.	Old scale of salaries exclusive of Local Allowance (Rs. 5 to 6 per mensem).	New scale of salaries. (No Local Allowance.)
	Rs.	Rs.
Untrained Teachers.		
(A) Ordinary Vernacular Final pass d, &c....	Rs. 15—3 years—20 per mensem.	24 only.
(B) *"Qualified Teachers"	*Nil.*	25—½—40 per month.
Trained Teachers.		
(C) 1st Year trained	Rs. 18—30 years—30 per mensem	25—½—55 „
(D) 2nd „ „	„ 21—30 „ —50 „	30—¾—75 „
(E) 3rd „ „	„ 24—30 „ —70 „	40—½—100 „
Eng'ish Qualifications.		
(F) Matric, School Final, Undergraduates or their equivalents	„ 17—25 per mensem for Matric and School Final. 25—35 per month for P. E.	30—¾—75 „
(G) Matric, School Final, Undergraduates with 2nd Year Vernacular Training Certificate	*Nil.*	40—½—100 „
(H) B. As with S. T. C. . iploma ...	*Nil.*	60—½—150 „
Special Teachers.		
(I) Drill, Drawing and Music Teachers ...	Rs. 30—30 years—70 per mensem.	40—½—100 „
(J) Sewing and Knitting and English Lady Teachers for Girls' Schools	„ 20—30 „ —50 „	30—¾—75 „
(K) Koran Teachers in Gujerathi Girls' Schools	„ 15—3 „ —20 „	25—½—55 „
(L) Second Grade Public Service Certificate.	Rs. 17—25 per mensem.	25—½—55 „
* * * * * *	* * * * *	* * * *
(M) For Acting Teachers	„ 15 per mensem	Rs. 24 per month.
(N) For Prob. or provisional appointments.	Minimum salary as per training qualifications.	(Minimum as per qualifications).
Peons and Hamals.		
(O) School peon	Rs. 14—15 per mensem	15—½—20 per month.
(P) Hamals...	Rs. 12 only.	Rs. 14 only.

* QUALIFIED TEACHERS.—Those who pass the local examination to be conducted under the control of the Schools Committee in studies equivalent to those prescribed for the 1st Year Training College Examnation.

The Schools Committee's Office,
Bombay, 25th August 1919.

D. G. PADHYE,
Secretary, Schools Committee.

Appendix B.

Statement of Actual Income and Expenditure of the "School Fund" for the year 1918-19.

Receipts.	Amount.			Payments.	Amount.		
	Rs.	a.	p.	A.—SCHOOLS.	Rs.	a.	p.
1. Balance on the 1st of April 1918	14,154	13	4	1. Head Masters and Teachers	4,61,572	5	11
				2. Servants	15,434	7	6
2. Fees from Municipal Schools	43,870	13	0	3. Rent	1,96,796	3	8
				4. Cost of Class Books	656	10	5
3. Contribution from the General Municipal Fund..	8,36,600	0	0	5. School Furniture	19,632	9	8
				6. Prizes	5,719	1	2
4. Government Grants-in-Aid towards buildings ...	.....			7. Contingencies and Miscellaneous	28,874	13	1
				8. Scholarships in Schools	531	0	0
5. Interest on Endowments or Investments ...	2,553	5	0	9. Stipends of Students under training as Vernacular Teachers	9,238	3	11
				10. Superintendents' Establishment	15,439	4	3
6. Miscellaneous	324	10	8	11. Grants-in-Aid to Primary Schools	85,373	11	0
				12. Library and Museum	1,605	4	10
				13. Medical Inspection	6,683	6	9
				B.—BUILDINGS.			
				1. Municipal Original Works	.....		
				2. Repairs to Municipal School Houses	5,889	5	5
				Balance on 31st March 1919	44,066	2	5
Total Rs. ...	8,97,503	10	0	Total Rs. ...	8,97,503	10	0

The Schools Committee's Office,
Bombay, 25*th August* 1919.

D. G. PADHYE,
Secretary, Schools Committee.

Appendix C.

Balance Sheet of the "School Fund" for the year 1918-19.

LIABILITIES.	Rs.	a.	p.	ASSETS.	Rs.	a.	p.
To Deposit Account	4,999	0	8	By Bank of Bombay, Government, &c., Paper Deposit Account	52,000	0	0
„ Harkisondas Brijlal Prize Fund—							
Principal ... ... Rs. 500 0 0							
Interest ... ... „ 11 8 5							
	511	8	5	„ Bank of Bombay, Surplus Cash, Government, &c., Paper Deposit Account	10,801	0	0
„ Dr. Blaney Prize Fund—							
Principal ... ... Rs. 1,000 0 0							
Interest ... ... „ 25 7 11							
	1,025	7	11	„ Bank of Bombay on account of Securities from Contractors	2,200	0	0
„ Madhavdas Raghuathdas Prize Fund—							
Principal ... ... Rs. 500 0 0							
Interest ... ... „ 12 4 0							
	512	4	0				
„ Jivcore Lallubhai Scholarship, &c., Fund—				„ Advance Account—			
Principal ... ...Rs. 1,000 0 0							
Interest ... ... „ 219 5 0							
	1,219	5	0	To the Secretary ... ... Rs. 130 0 0			
„ Bachoobai S. Bengalee Prize Fund—							
Principal ... ... Rs. 1,000 0 0							
Interest ... ... „ 22 0 2							
	1,022	0	2	„ Superintendent—			
„ Lady Hardinge Prize Fund—							
Principal ... ... Rs. 1,200 0 0				Marathi Schools ... Rs. 80 0 0			
Interest ... ... „ 45 14 1							
	1,245	14	1	Gujerati „ ... „ 20 0 0			
R. S. Taki Scholarship and Prize Fund—							
Principal ... ... Rs. 1,100 0 0				Urdu „ ... „ 20 0 0			
Interest ... ... „ 46 5 4							
	1,146	5	4		200	0	0
War Loan Prize Fund—							
Principal ... ...Rs. 2,900 0 0							
Interest ... ... „ 74 1 8							
	2,974	1	8	„ Advance, Miscellaneous	30	0	0
„ Parmanand Raja Endowment Fund—							
Principal ... . Rs. 13,800 0 0							
Interest ... ... „ 820 0 0							
	14,620	0	0	„ Actual Cash Balance—			
„ Bai Valibai Vallabhdas Endowment Fund—							
Principal ... ... Rs. 29,000 0 0							
Interest ... ... „ 153 0 10							
	29,153	0	10	In Bank of Bombay ... Rs. 38,591 9 11			
„ Paper Deposit from Contractors—							
Principal ... ... Rs. 2,200 0 0							
Interest ... ... „ 129 6 0				„ Office Treasury ... ... „ 1,562 14 7			
	2,329	6	0				
„ Donation for Training Urdu Teachers	2	0	0		40,154	8	6
„ N. S. Bengalee Donation	4	0	0				
„ Cutchi Memon Scholarship	28	0	0				
„ S. M. Edwardes Scholarships	27	0	0				
„ Cash Deposits from Contractors	500	0	0				
„ Income and Expenditure Account—							
Balance on 31st March 1919	44,066	2	5				
Total Rs. ...	1,05,385	8	6	Total Rs. ...	1,05,385	8	6

The Schools Committee's Office,
Bombay, 25*th August* 1919.

D. G. PADHYE,
Secretary, Schools Committee.

Appendix D.

The Aided Schools.

The following table shows the number of Aided Schools with the attendance thereat. The amount of grant paid to them from the "School Fund" during the year 1918-19 was Rs. 85,373-11-0 as against Rs. 70,282-15-0 for the previous year :—

Classes of Schools.	Aided.			
	1918-19.		1917-18.	
	Schools.	Pupils.	Schools.	Pupils.
Marathi.				
Day Schools—				
Primary for boys	47	4,299	47	4,671
Do. for girls	17	1,296	17	1,445
Total	64	5,595	64	6,116
Night Schools	21	452	20	339
Total of Marathi Schools ...	85	6,047	84	6,455
Gujerati.				
Day Schools—				
Primary for boys	35	4,655	34	4,260
Do. for girls	27	3,381	24	3,311
Total	62	8,036	58	7,571
Night Schools	2	105	3	113
Total of Gujerati Schools ...	64	8,141	61	7,684
Urdu.				
Day Schools—				
Primary for boys	7	1,029	7	1,085
Do. for girls	2	594	2	504
Total	9	1,623	9	1,589
Night Schools	2	109	.....	.....
Total of Urdu Schools ...	11	1,732	9	1,589
Tamil Day Schools	1	54	1	29
Hindi Day Schools	2	207	1	150
Grand Total of Marathi, Gujerati, Urdu, Tamil and Hindi Schools ...	163	16,181	156	15,907

The Schools Committee's Office,
Bombay, 25*th August* 1919.

D. G. PADHYE,
Secretary, Schools Committee.

Appendix E.

Race of Pupils.

The number of pupils in the Municipal and Aided Schools according to their races was as under:—

Race.	1918-19.			1917-18.		
	Municipal.	Aided.	Total.	Municipal.	Aided.	Total.
Europeans and Eurasians	...	...	...	...	...	...
Portuguese and Native Christians	121	420	541	126	387	513
Hindus	18,750	7,820	26,570	20,735	8,109	28,844
Mahomedans	7,480	3,588	11,068	7,131	3,232	10,363
Buddhists	...	...	...	...	...	...
Parsis	236	3,807	4,043	280	3,569	3,849
Others	245	546	791	105	610	715
Total ...	26,832	16,181	43,013	28,377	15,907	44,284

Appendix F.

Unrecognized and Unaided Primary Schools.

The following is a rough estimate of the number and attendance in Unrecognized and Unaided Primary Schools in Bombay City:—

Class of Schools.	Number of	
	Schools.	Pupils.
MARATHI.		
Primary for boys	11	393
Do. for girls	.....	.....
Total ...	11	393
GUJERATHI.		
Primary for boys	16	1,187
Do. for girls	6	658
Total ...	22	1,845
URDU.		
Primary for boys	20	1,716
Do. for girls	.....	.....
Total ...	20	1,716
Grand Total of Marathi, Gujerathi and Urdu Schools...	53	3,954

The Schools Committee's Office,
BOMBAY, 25*th August* 1919.

D. G. PADHYE,
Secretary, Schools Committee.

Appendix G.

THE PROGRESS OF PRIMARY EDUCATION IN BOMBAY.

A. *Under the Joint Schools Committee.*

Year.	No. of Schools.	Increase or Decrease.	No. of pupils.	Increase or Decrease.	Average monthly No. of pupils on rolls.	Increase or Decrease.	Total expenditure.	Increase or Decrease.
							Rs.	Rs.
* 1890-91...	62	...	6,134	...	...	...	81,861	...
† 1908-09...	102	+40	10,314	+4,180	...	...	2,54,888	+1,73,027

* Being the first year of the Joint Schools Committee.

† Being the last year.

B. *Under the (Municipal) Schools Committee from year to year.*

1909-10...	114	+ 12	11,559	+ 1,245	...	...	2,88,202	+ 33,314
1910-11...	127	+ 13	13,255	+ 1,696	...	...	3,30,890	+ 42,688
1911-12...	142	+ 15	15,861	+ 2,606	...	...	3,38,263	+ 7,373
1912-13...	160	+ 18	16,746	+ 885	...	...	3,78,088	+ 39,825
1913-14...	174	+ 14	18,846	+ 2,100	...	...	4,37,815	+ 59,727
1914-15...	179	+ 5	18,046	— 800	...	...	4,77,963	+ 40,148
1915-16..	183	+ 4	21,669	+ 3,623	...	..	5,02,173	+ 24,210
1916-17...	195	+ 12	23,987	+ 2,318	22,829	...	5,68,398	+ 66,225
1917-18...	211	+ 16	28,377	+ 4,390	25,103	+ 2,274	6,95,243	+ 1,26,845
1918-19...	233	+ 22	26,832	— 1,545	26,066	+ 963	8,53,437	+ 1,58,194

THE SCHOOLS COMMITTEE'S OFFICE,
BOMBAY, 25*th August* 1919.

D. G. PADHYE,
Secretary, Schools Committee.

Appendix H.

Statement showing the names and localities of the Bombay Municipal Schools and the number of pupils attending each school as it stood on 31st March 1919 :—

MARATHI SCHOOLS.

Serial No.	Name of School.	Locality.	No. of pupils on roll on 31st March 1919.
	Boys' Schools.		
1	Angrewadi School	Chawl No. 6, Angrewadi, Girgaon Back Road, Bombay. Post Girgaon.	176
2	Byculla School	No. 20, DeLisle Road, opposite New Byculla Station, Post Byculla.	173
3	Carpenter Street School ...	No. 74, Isak building, near Mahadeo's Temple, Sandhurst Road, Post Girgaon.	154
4	Cavel Street School ...	Cavel Street, Post Kalbadevi, Bombay ...	19
5	Charni Road School ...	No. 2A, Charni Road, Post Girgaon ...	96
6	Chinchpoogli School ...	No. 410, Parel Road, Chinchpoogli, Post Parel.	385
7	Colaba School	No. 379-81, Colaba Causeway, Post Colaba.	146
8	Crawford Market Nirashrit School	Sitaram Building, F Block Paltan Road, Fort, Bombay, General Post.	135
9	Currey Road School ...	Fergusson Road, near Lower Parel Station, Bombay, Post Fergusson Road.	217
10	Dadar School	No. 163, Dadar Main Road, Post Dadar ...	71
11	Dadar Kumbharwada School.	No. 704, Portuguese Church Road, Dadar Kumbharwada, Post Dadar	195
12	Dadar Nirashrit School ...	No. 11A near Elphinstone Road Bridge, Post Parel.	85
13	Dana Bunder School ...	J. Plot, Chinch Bunder, near Elphinstone Bridge, Post Umerkhadi.	139
14	DeLisle Road Free Mill School.	Hussani Building, DeLisle Road, Post Jacob Circle.	170
15	DeLisle Road Free Mill Class	Do, do, ...	106
16	Dharavi Nirashrit School ...	No. 174, Hasan Dharsi's Bungalow, Dharavi, Post Dharavi.	65
17	Dhobi Talao Nirashrit School	No. 36, Sonapur Lane, Post Kalbadevi ...	106
18	Dongri Nirashrit School ...	No. 7A, Umerkhadi, Post Umerkhadi ...	134
19	Dongri 2nd Grade Anglo-Vernacular School.	Umerkhadi Jail Road, Post Umerkhadi ...	253
20	Duncan Road Nirashrit School.	No. 530, Upper Duncan Road, Post Byculla.	115
21	Fergusson Road School ...	Near Varli Naka, Fergusson Road, Post Fergusson Road.	124
22	Fergusson Road Mill School.	No. C 54, Magan Baug, Fergusson Road, Post Varli.	116
23	Fort Boys' School	Frere Road, Fort, Bombay	123
24	Gamdevi School	Opposite Victoria Mills, Gamdevi, Post Grant Road.	206
25	Ghodapdeo School	No. 115, Ghodapdeo Road, Post Mazagon ...	269
26	Girgaum School	No. 1, Naka of Kelewadi Road, Post Girgaon.	237
27	Gopi Tank School	Lady Jamsedji Road, opposite Gopi Talao, Post Mahim.	126
28	Grant Road Boys' School ...	No. 1, Chikalwadi, Grant Road, Post Grant Road.	120
29	Kalachowki School	No. 31, Kalachowki Road, Post Parel ...	160
30	Kamatipura Nirashrit School	No. 49-51, Foras Road, Kamatipura, Post Byculla.	308
31	Kamatipura 2nd Grade Anglo Vernacular School.	No. 176, Bazar Road, Kamatipura 13th Lane, Post Byculla.	315
32	Kandewadi School	Nanavati's House, opposite Kahanji Khetsi's Chawl, Kandewadi, Post Girgaon.	213

Appendix H—*continued.*

Serial No	Name of School.	Locality.	No. of pupils on roll on 31st March 1919.
		Boys' School—contd.	
33	Khetwadi 2nd Grade Anglo-Vernacular School.	Khetwadi 1st Lane, Post Girgaon, Bombay...	235
34	Lalwadi School	Supari Baug Road, near Supari Baug Mill, Post Parel.	237
35	Lamington Road School ...	Tribhowan Terraces, end of Chunam Kiln Road, Post Girgaon.	266
36	Lord Harris School... ...	A Ward No. 3707 (3) Street No. 7, Carnac Road, Fort, Bombay.	242
37	Lower Mahim School ...	No. 222, Lower Mahim, Agar Bazar, Prabhadevi Road, Post Dadar.	223
38	Lower Parel Mill School ...	Magan Baug, Fergusson Road, Bombay, Post Parel	62
39	Madanpura School	Madanpura Improvement Trust Chawl, No. 25, Post Jacob Circle.	120
40	Madanpura Nirashrit School.	No. 108, Madanpura Morland Road, Post Jacob Circle.	116
41	Mahalakshmi School ...	Near Mahalaxmi Temple, Post Malabar Hill...	59
42	Mandvi School	No. 19-25, Kazi Syed Street, Avate's House, Post Mandvi.	72
43	Matunga School	No. 622, Naigaum Road, Post Dadar ...	89
44	Mazagon School	Dock-Yard Road, Bhandarwada Hill, Post Mazagaon.	258
45	Memonwada School ...	Old Nagapada, Sandhurst Road, Post Umerkhadi.	81
46	Nagdevi School	No, 464-466, Abdul Rahiman Street, Post Mandvi.	39
47	New Nagpada School .	No. 42-43, 2nd Pirkhan Lane, New Nagpada, Post Byculla.	174
48	Parbhadevi Road School ...	Suraja Building near Elphinstone Road Bridge, Bombay, No. 13, Post Fergusson Road	128
49	Parmanand Raja School ...	No. 191, Kumbharwada 2nd Lane, Durgadevi, Post Girgaon.	176
50	Parel School	No. 1390, Parel Back Road, opposite Animal Hospital, Post Parel.	109
51	Parel Bhoiwada School ...	No. 138-139, Parel Bhoiwada Road, Post Parel.	92
52	Seven Road School... ...	No. 1, Jacob Circle. Post Jacob Circle, Bombay.	137
53	Shivdi School	No. 441, Shivadi Road, J. J. Dubash & Sons' Bungalow, Post Shivadi.	82
54	Sion School...	Dharavi Road, near Sion Station, G. I. P. Railway, Post Dharavi.	93
55	South Girgaon School ...	Jitekar's Wadi, Thakurdwar Road, Post Kalbadevi, Bombay.	247
56	Supari Baug Road School ...	No. 498, opposite Dinshaw Petit Mill, Post Parel, Bombay.	126
57	Tardeo School	No. 111, Lamington Road, Bombay No 7, Post Grant Road.	236
58	Tardeo Bridge School ...	No. 1, Jetha Ladha's Wadi, Tardeo, Bombay, Post Grant Road.	147
59	Thakurdwar School... ...	No. 434, Girgaon Road, Naka of Thakurdwar, Post Kalbadevi.	222
60	Upper Colaba Nirashrit School.	No. 19-21, Shroff Street, Post No. 5, Colaba, Bombay.	70
61	Upper Mahim School ...	No. 444, Lady Jamsedji Road, opposite Post Office, Mahim.	210
62	Valkeshwar School... ...	Muttanwadi, Valkeshwar, Post Malabar Hill, Bombay.	68
63	Valkeshwar Lower Primary School.	No. 2, Dongarsi Lane, Malabar Hill, Post Malabar Hill, Bombay.	125
64	Varli School	Varli 1st Pakhadi, Post Varli.	100
65	Varli Koliwada School ...	Varli Koliwada, near Varli Bandha, Post Varli.	120
66	Vithalwadi School	No. 256, Angre's Wada, Kalbadevi Road, Post Kalbadevi.	155

Appendix H—*continued.*

Serial No.	Name of School.	Locality.	No of pupils on roll on 31st March 1919.
	Girls' Schools.		
67	Angrewadi Girls' School ...	No. 6, Angre Wadi, Girgaon Back Road, Post Girgaon.	133
68	Byculla Girls' School ...	No. 26, DeLisle Road, opposite Byculla Station, Post Byculla.	109
69	Charni Road Girls' School...	No. 2 A., Charni Road, Post Girgaon, Bombay.	116
70	Chinchpokli Girls' School ...	No. 410, Parel Road, Chinchpoogli, Post Parel.	111
71	Colaba Girls' School ...	No. 379-81, Colaba Causeway, Post Colaba, Bombay.	64
72	Dadar Girls' School ...	No. 163, Dadar Main Road, Post Dadar ...	39
73	Dadar Kumbharwada Girls' School	No. 724, Dadar Kumbharwada, Post Dadar.	356
74	Dongri Girls' School ...	Umarkhadi Jail Road, Post Umarkhadi. ...	83
75	Durgadevi Girls' School ...	No. 225, Kumbharwada Road, Kitte Bhandari Hall, Post Girgaon.	72
76	Elphinstone Bridge Girls' School.	Suraj Building, near Elphinstone Rd. Bridge, Bombay No. 13, Post Fergusson Road.	36
77	Gamdevi Girls' School ...	No. 15, Gamdevi, Bombay, Post Grant Road.	146
78	Girgaum Girls' School ...	No. 1, Naka of Kelewadi, Girgaon Road, Post Girgaon.	181
79	Gopi Talao Girls' School ...	Lady Jamsedji Road, opposite Gopi Talao, Post Mahim.	63
80	Grant Road Girls' School ...	No. 1, Chikhalwadi, Post Grant Road, Bombay.	102
81	Kalbadevi Girls' School ...	No. 236, Kalbadevi Road, Angre's Wada, Post Kalbadevi.	49
82	Kamatipura Girls' School...	No. 129, Kamatipura Bazar Road, Naka of 9th Lane, Post Byculla.	155
83	Kandewadi Girls' School ...	Dewoolkar's House, Shenvi's Wadi, Kandewadi, Post Girgaon.	199
84	Khetwadi Girls' School ...	Ramchandra Mansion, Khetwadi, Post Girgaon, Bombay.	70
85	Lalwadi Girls' School ...	Supari Baug Road, Post Parel, Bombay. ...	46
86	Lamington Road Girls' School	Tribhuwan Terraces, end of Chunam Kiln Road, Post Girgaon, Bombay.	208
87	Lord Harris Girls' School ...	No. 3707 (3), Street No. 7, Carnac Road, Fort, Bombay.	98
88	Lower Mahim Girls' School.	No. 864, Lower Mahim Agar Bazar, Prabhadevi Road, Post Dadar.	140
89	Lower Parel Girls' School...	No. 1103 A, G. Ward, Parel Bombay 13 ...	83
90	Matunga Girls' School ...	No. 622, Naigaum Road, Matunga, Post Dadar	45
91	Mazagaon Girls' School ...	Dock-Yard Road, Bhandarwada Hill, Post Mazagon.	64
92	Nagdevi Girls' School ...	No. 518-520, Abdul Rahiman Street, Post Mandvi, Bombay.	26
93	New Nagpada Girls' School.	No. 42-43, 2nd Pirkhan Lane, New Nagpada, Bombay, Post Byculla.	99
94	Parel Girls' School ...	Parel Back Road, opposite Animal Hospital, Post Parel.	92
95	Parel Bhoiwada Girls' School	No. 138-39, Parel Bhoiwada Road, Post Parel.	36
96	Sion Girls' School ...	Dharavi Road, near G I. P. Railway Sion Station, Post Dharavi.	35
97	South Girgaon Girls' School	Jitekar's Wadi, Thakurdwar Road, Post Kalbadevi, Bombay.	205
98	Tardeo Girls' School ...	No. 111, Lamington Road, Bombay, No. 7 ...	48
99	Thakurdwar Girls' School ...	No. 434, Girgaon Road, Naka of Thakurdwar, Post Kalbadevi.	176
100	Upper Mahim Girls' School .	No. 143, Upper Mahim Kapad Bazar, Post Mahim, Bombay.	131
101	Varli Girls' School ...	No. 239 B, Varli Middle Pakhadi, Post Fergusson Road.	90

Appendix H—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on roll on 31st March 1919.
	Night Schools.		
102	Chinchpoogli Boys' Night School.	No. 410, Parel Road, Chinchpoogli, Post Parel, Bombay.	50
103	Tardeo Boys' Night School .	No. 111, Lamington Road, Post Grant Road.	13
	Total 103 + 3 Anglo-Vernacular Schools = 106.	Total No. of pupils of Marathi Schools including Anglo-Vernacular Schools.	13,937

N. B.—Nos. 19, 31 and 33 are Anglo-Vernacular Schools. The attendance given includes the number of pupils of the Anglo-Vernacular Branch.

GUJERATI SCHOOLS.

	Boys' Schools.		
1	Anantwady Boys' School ...	No. 56, Dady Seth Agiary Road, Bombay, Post Kalbadevi.	167
2	Bapty Road Nirashrit School.	Arab Lane, Grant Road, Post Grant Road ...	149
3	Bhat Bazar School ...	No. 508-510, Bhat Bazar, Mandvi, Bombay, Post Mandvi.	30
4	Bhendy Bazar School ...	No. 80-82, Bhendi Bazar, Haji Building, Banyan Road, Post Umerkhadi.	129
5	Bhuleshwar 2nd Gr. A. V. School.	Over Bhuleshwar Market, Bhuleshwar, Post Kalbadevi.	432
6	Budhivardhak School ...	No. 160, Kalbadevi Road, Post Kalbadevi.	201
7	Byculla School ...	No. 20, DeLisle Road, Byculla, Post Byculla.	41
8	C. P. Tank School ...	No. 186, End of Kumbhar Tukda, Thakurdwar Road, Post Kalbadevi.	162
9	Colaba School ...	Colaba Causeway, Temperance Hall Building, Post Colaba.	22
10	Dadar School ...	No. 159, Dadar Road, Dadar, Post Dadar.	91
11	Elphinstone Road School ...	No. 3470, Elphinstone Road, Suraj Building, near the Bridge, Post Fergusson Road.	64
12	Fort School ...	No. 216-220, Bohra Bazar Street, Fort, Post G. P. O.	81
13	Fort Nirashrit School ...	Shroff Street, Colaba Causeway, Post Colaba	27
14	Girgaum School ...	No. 819-27, Girgaon Back Road, near Prarthana Samaj, Post Girgaum.	141
15	Grant Road School ...	No. 339, Grant Road Bridge View, Post Grant Road.	86
16	Kapad Bazar School ...	No. 506-507, Shaikh Memon Street, Post Kalbadevi.	221
17	Kika Street School ...	No. 7-19, Kika Street, Post Kalbadevi ...	140
18	Lord Harris School ...	Princess Street, The New Piece Goods Bazar Co.'s House, Post Kalbadevi.	148
19	Lower Parel School ...	No. 358, opposite Lower Parel Station, Post Fergusson Road.	73
20	Madanpura Nirashrit School.	No. 23-24, Ripon Road, Post Byculla ...	48
21	Mahim School ...	No. 14, Mahim Bazar Road, Post Mahim ...	122
22	Mandvi School ...	Ram Building, Katha Bazar, Mandvi Post, Mandvi.	51
23	Matunga School ...	Mr. Moolraj Nensi's House, Matunga Road, Post Matunga.	130
24	Mazgaon School ...	Matharpakhadi Road, Mazagon, Post Mazagaon.	70

Appendix H—*continued.*

Serial No.	Name of School	Locality.	No. of pupils on roll on 31st March 1919.
25	Musjid Bunder School ...	Near the Bridge, Musjid Bunder Road, Post Mandvi.	71
26	Naigaum School ...	No. 58, Naigaum Road, Dadar, Post Dadar...	39
27	Nal Bazar School ...	Sandhurst Road at the end of Bhandari Street, Post Umerkhadi.	247
28	Parbhadevi Road Nirashrit School.	New Parbhadevi Road, Post Dadar	73
29	Parel School ...	No. 91 A, Parel Road, Chinchpoogli, Post Parel.	60
30	Parel Bhoiwada L. P. School	No. 285, Parel Bhoiwada, Post Parel ...	20
31	Parel Bhoiwada School ...	Ibrahim Building, Poi Bavdi, Parel, Post Parel.	67
32	Rangari Street School ...	Barbhaya Moholla, Luxmi Building, Post Mandvi.	60
33	Seven Roads School ..	Haines Road, 48L, Seven Roads, Post Jacob Circle.	31
34	Walkeshwar School ...	Dr. Khote's Bungalow, Doongarsi Road, Post Malabar Hill.	97
35	Walpakhadi Nirashrit School.	Walpakhadi, Post Umerkhadi	120
	Girls' Schools.		
36	Bhuleshwar Girls' School ...	Over Bhuleshwar Market, Bhuleshwar, Post Kalbadevi.	129
37	Bhuleshwar Lower Primary Girls' School.	Ramji Keshovji's House, 2nd Bhoiwada, Bhuleshwar, Post Kalbadevi.	83
38	Byculla Girls' School ...	Byculla, Khambatta Lane, Post Byculla ...	54
39	C. P. Tank Girls' School ...	No. 186, end of Kumbhar Tukda, Thakurdwar Road, Post Kalbadevi.	93
40	Dadar Girls' School ...	No. 159. Dadar Road, Post Dadar	45
41	Fort Girls' School ...	Makanji Khatow's House, Bazar Gate Street, Bombay, G. P. O.	112
42	Girgaum Girls' School ...	No. 190, Girgaum Back Road, near Prarthana Samaj, Post Girgaum.	87
43	Grant Road Girls' School ...	No. 339, Bridge View, Grant Road, Post Grant Road.	29
44	Jairajbhai Peerbhai Girls' School.	Dongri Street, Mahomed Yusuf Khatkhatay's House, Post Umerkhadi.	56
45	Kalbadevi Girls' School ...	No. 189-203, Kalbadevi Road, Post Kalbadevi	332
46	Kapad Bazar Girls' School...	Vithalwady, Seth Purshotam Govindji's House, Post Kalbadevi.	119
47	Kika Street Girls' School ...	No. 7-19, Kika Street, Post Kalbadevi ...	114
48	Mandvi Girls' School ...	Ram Building, Katha Bazar, Mandvi, Post Mandvi.	61
49	Mazagaon Girls' School ...	Matharpakhadi Road, Mazagaon, Post Mazagaon.	38
50	Musjid Bunder Girls' School	No. 295-297, Musjid Bunder Road, Post Mandvi.	65
51	Nal Bazar Girls' School ...	Sandhurst Road, at the end of Bhandari Street, Post Umerkhadi.	103
52	Parel Girls' School... ...	No. 91 A, Chinchpoogli Road, Parel, Post Parel.	70
53	Parel Bhoiwada Girls' School	Ibrahim Building, Poi Bavdi, Parel, Post Parel.	51
54	Princess Street Girls' School	The New Piece-Goods Bazar Co.'s House, Princess Street, Post Kalbadevi.	102
55	Rangari Street Girls' School	No. 67-69, Bhajipala Lane, Post Mandvi ...	78
56	S. S. Bengallee Girls' School	No. 4, Karelwady, Post Kalbadevi	141
57	Valibai Girls' School ...	No. 54, Dady Seth Agiary Lane, Post Kalbadevi.	256

Appendix H—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on roll on 31st March 1919.
	Night Schools.		
58	Parbhadevi Road Nirashrit Night School.	New Parbhadevi Road, Post Dadar... ...	21
	Total 58 + 1 Anglo-Vernacular School = 59	Total No. of pupils of Gujrathi Schools including Anglo-Vernacular Schools.	5,953

N.B.—No. 5 is an Anglo-Vernacular School and the number of pupils given includes the number of pupils of Anglo-Vernacular Branch also.

URDU SCHOOLS.

	Boys' Schools.		
1	Ali Umar Street Lower Primary School.	No. 78-80, Ali Umar Street, Mistry Mohalla, Post Umerkhadi.	96
2	Bengalipura School ...	At the end of Old Bengalipura, Post Mandvi.	119
3	Bapty Road Lower Primary School.	Bapty Road, Shaikh Sarifali Mamooji's Chawl, Post Byculla.	161
4	Bhownagri Moholla School.	No. 469, Bhownagri Moholla, Post Mandvi...	152
5	Byculla School	Opposite Byculla Station, Gujeri Bazar, Post Byculla.	60
6	Carroll Road School ...	Dr. Batliwala's House, opp. Elphinstone Road Station, Carroll Road, Post Ferguson Road.	72
7	Chhatrisarang School ...	Corner of Nishanpada Road and Sandhurst Road, Post Umerkhadi.	150
8	Colaba School	No. 22, Colaba, Hamal Road, Post Colaba ...	39
9	Dadar School	Dadar, opposite Gold Mohor Mill, Rangari's Chawl, Post Dadar.	60
10	DeLisle Road Lower Primary School.	No. 180, Haines Road, Agripada, Post Jacob Circle.	39
11	Dharavi School	No. 157, Dharavi Road, Koliwada, Post Dharavi.	83
12	Dhobi Talao School ...	No. 36-37, Old Sonapur Lane, Post Kalbadevi	100
13	Falkland Road School ...	No. 3-4, Falkland Road, 9th Cross Lane, Post Girgaum.	155
14	Foras Road School... ...	No. 84, Foras Road, Post Byculla	130
15	Fort School	Modikhana, Fort, Bombay, G. P. O.... ...	135
16	Ghogari Moholla Lower Primary School.	No. 80-82, Ghogari Moholla, Haji Building, Post Umerkhadi.	130
17	Gowly Moholla Lower Primary School.	No. 513-523, Memonwada Street at the end of Old Nagpada, Post Umerkhadi.	172
18	Imamwada School	No. 297-305, Bhendi Bazar, Post Umerkhadi	103
19	Islampura Lower Primary School.	No. 391, Khetwadi Main Road, Post Girgaum.	173
20	Jacob Circle School ...	No. 1, Jacob Circle, Post Jacob Circle ...	123
21	Jambli Moholla School ...	No. 148, Ghogari Moholla, Musjid Lane, Post Umerkhadi.	233
22	Kalapani Lower Primary School.	No. 108, Moreland Street, Madanpura, Post Jacob Circle.	56
23	Kamathipura School ...	Kamathipura 1st Lane, Stable Street, Post Byculla.	42
24	Karelwadi School	No. 180-3, Karelwadi, Thakurdwar, Post Kalbadevi.	29
25	Khandia Street Lower Primary School.	No. 180, Chimna Butcher Street, Post Umerkhadi.	225
26	Khara Talao School ...	No. 224, Khoja Street, Khara Talao, Post Umerkhadi.	225

Appendix H—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on roll on 31st March 1919.
	Boys' Schools—contd.		
27	Kolsa Moholla School ...	No. 96-98, Kolsa Moholla, Post Mandvi ...	65
28	Lower Parel School ...	No. 1070, Lower Parel, Ferguson Road, Post Ferguson Road.	70
29	Madanpura School	Madanpura, Moreland Road, Post Jacob Circle	230
30	Mahim School	No. 138, Mahim Bazar Road, Post Mahim ...	144
31	Matunga School	No. 682, near Cotton Mills, Matunga Road, Post Matunga.	41
32	Moreland Road School ...	Teja Noora's Stable, Moreland Road, Post Jacob Circle.	155
33	Nagpada School	No. 48, Hujria Street, New Nagpada, Post Byculla.	137
34	Nakhoda Moholla Lower Primary School.	No. 361-365, Nakhoda Moholla, Post Mandvi.	65
35	Parel School	Sheth Abdoola Haji Dawood's House, Kalachowki Road, Post Parel.	119
36	Rangari Moholla School ...	No. 67-69, Rangari Moholla, Post Mandvi ..	92
37	Safrabadi Lower Primary School.	No. 64, Safrabadi, Ripon Road, Post Byculla.	80
38	Sarang Street School ...	No. 612-614, Bangdi Bazar, Abdul Rehman Street, Post Mandvi.	51
39	Shivdi School	No. 115, Shivdi Kolivada, Post Shivdi ...	103
40	Soparibag Road School ...	Dada Building, opposite Musjid, Parel Road, Post Parel.	25
41	Suklaji Street School ...	Kamathipura 13th Lane, Post No. 8	50
42	Surti Moholla Lower Primary School.	No. 80-82, Surti Moholla, Post Byculla ...	40
43	Tank Bunder School ...	No. 8, Tank Bundar, Post Mazagon	116
44	Tardeo School	Lamington Road, Bombay No. 7	101
45	Temkar Street Lower Primary School.	Sultan Building, Temkar Street, Post Byculla	117
46	Telli Moholla Lower Primary School.	No. 6-8, Telli Moholla, Post Byculla	150
47	Undria Street Lower Primary School.	No. 118-124, Undria Street, Post Byculla...	81
48	Walkeshwar School ...	Dr. Khote's Bungalow, Doongarsi Road, Post Malabar Hill.	25
49	Wari Bundar School ..	No. 22, Mazagaon Road, Post Mazagaon ...	74
50	Yakub Street Lower Primary School.	Nasroola Building, Pakmodia Street, Post Umerkhadi.	100
	Girls' Schools.		
51	Bhownagri Moholla Girls' School.	No. 469, Bhownagri Moholla, Post No. 3 ...	153
52	Chhatrisarang Girls' School.	No. 51-53, Old Nagpada Road, Post Umerkhadi.	119
53	Falkland Road Girls' School.	No. 3-4, Falkland Road, 9th Cross Lane, Post No. 4.	75
54	Ghogari Moholla Girls' School.	Ghogari Moholla, Post Umerkhadi ...	122
55	Imamwada Girls' School ...	No. 297-305, Bhendi Bazar, Post Umerkhadi.	56

Appendix H—*concluded.*

Serial No.	Name of School.	Locality.	No. of pupils on roll on 31st March 1919.
	Girls' Schools—contd.		
56	Khara Talao Girls' School...	No. 224, Khoja St., Khara Talao, Post Umerkhadi.	110
57	Kolsa Moholla Girls' School	No. 87–89, Kolsa Moholla, Post Mandvi ...	148
58	Madanpura Girls' School ...	Moreland Road, Madanpura, Post Jacob Circle	151
59	Moreland Road Girls' School	Teja Noora's Stable, Moreland Road, Post No. 8.	100
60	Nagpada Girls' School ...	Huzeria Street, New Nagpada, Post Byculla..	103
61	Nizampura Girls' School ...	No. 148, Ghogari Moholla, Musjid Lane, Post Umerkhadi	212
62	Temkar Street Girls' School.	Sultan Building, Temkar Street, Post No. 8...	83
63	Wari Bunder Girls' School.	No. 22, Mazagaon Road, Post Mazagaon. ...	56
64	Yakub Street Girls' School.	Nasroola Bldg, Packmodia St., Post Umerkhadi.	100
	Night Schools.		
65	Kamathipura Night School.	Kamathipura 1st Lane, Stable Street, Post Byculla.	40
66	Khara Talao Night School.	No. 224, Khoja Street Khara Talao, Post Umerkhadi.	32
67	Madanpura Night School ...	No. 64, Safrabadi, Ripon Road, Post ...	60
68	Parel Night School	Sheth Abdoola Haji Dawood's House, Kalachowki Road, Post Parel.	19
68		Total No. of pupils ...	6,942

		Total No. of pupils on roll on 31st March 1919.
106	Marathi Schools	... 13,937
59	Gujerathi „	... 5,953
68	Urdu „	... 6,942
233	Total	... 26,832

Appendix I.

Statement showing the names and localities of Schools aided from School Fund, the number of pupils attending each school and the amount of grant paid to each Aided School during the year 1918-19 :—

Serial No.	Name of School.	Locality.	No. of pupils on 31st March 1919	Amount of Grant paid for 1918-19.
	Anjuman-i-Islam (Urdu) Schools.			Rs.
1	Nagpada School	Near J. J. Hospital	185	Fixed Grant of Rs. 5,000
2	Sandhurst Road School	Sandhurst Road	200	

MARATHI PRIMARY SCHOOLS.

	Boys' Schools.—Ch. II.			Rs. a. p.
1	A. M. Mckinley School	Jacob Circle	46	300 0 0
2	A. M. Byculla „	Parel Road, Byculla	138	600 0 0
3	Baldnyan Vardhak School ..	Kumbharwada 3rd Lane	129	521 0 0
4	Breach Candy Road „ ...	Naviwadi Agiari-lane	107	331 8 0
5	Chikitsak Samuha Potdar School...	Girgaum	154	1,047 8 0
6	D. N. Poor Boys' Seminary ...	Sleater Road	110	597 0 0
7	David Sassoon Reformatory School.	Matunga	90	550 0 0
8	Depressed Class M. Parel „ ...	Parel	230	778 0 0
9	G. E. Institute, Dadar ...	Dadar	233	685 8 0
10	Holy Cross Mission School ...	Umerkhadi, Mazagon	86	700 0 0
11	Islr elite School	Mazagaon...	215	1,000 0 0
12	Kamathipura 6th Lane School ...	Kamathipura	103	344 0 0
13	Khetwadi „ „ ...	Khetwadi	141	580 0 0
14	Madhavrao Rokde Free „ ...	Mandvi-Koliwada...	184	661 0 0
15	Mugbhat Private School... ...	Kandewadi, Girgaum	114	600 0 0
16	New Bal Shikshan „ ...	Girgaum	105	452 0 0
17	New Lines Primary „ ...	Princess Street	96	326 0 0
18	Patriotic Institution	Mugbhat Cross Lane	129	586 0 0
19	Prabhu Seminary School	Bhai Jivanji Lane, Thakurdwar ...	126	537 0 0
20	St. Andrews „	Umerkhadi	157	1,150 0 0
21	Tardeo Primary „	Shastri Hall, Tardeo	72	350 0 0
22	Tendulkar's Haines Road School...	Byculla, Jacob Circle	175	459 8 0

Appendix I—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on 31st March 1919.	Amount of Grant paid for 1918-19.
	Girls' Schools—Ch. II.			Rs. a. p.
23	A. M. Burnell Girls' School ...	Love Lane, Mazagaon	36	299 0 0
24	A. M. Parel School	Parel	51	288 8 0
25	A. M. Seven Roads Jacob Circle School.	Seven Roads, Jacob Circle ...	50	329 0 0
26	C. M. S. Emanuel Girls' School ...	Girgaum, Procter Road	87	1,000 0 0
27	Do. Navi-wadi „	Navi-wadi, Agiari Lane	74	694 0 0
28	M. E. Mission Colaba School ...	Colaba	48	175 0 0
		5 per cent. Supple. grant ...	...	8 12 0
29	S. L. & S. S. Bhau Daji Girls' School.	Kandewadi	103	773 0 0
30	Do. Jagonnath Shankar-Sett School	Palav Road, Girgaum	103	519 0 0
31	U. F. C. Mission Girgaum Girls' School.	Girgaum Road	108	1,200 0 0
		5 per cent. Supple. grant ...	...	60 0 0
32	Do. Gowalia Tank School ...	Gowalia Tank Road	119	800 0 0
		5 per cent. Supple. grant ...	...	40 0 0
33	Do. Amroli School ..	Girgaum Back Road	123	700 0 0
		5 per cent. Supple. grant ...	...	35 0 0
34	Z. B. M. M. Umerkhadi School ...	Umerkhadi, Jail Road	168	500 0 0
		5 per cent. Supple. grant ...	...	25 0 0
	Boys' Schools—Ch. III.			
35	Acworth Leper Asylum School ...	Matunga	11	80 0 0
36	Agripada Haines Road „ ...	Agripada, Byculla	33	69 0 0
37	A. M. Towley School	Byculla	22	76 0 0
38	Fanaswadi „	Takwadi, Picket Road, Kalbadevi	38	93 0 0
39	Girgaum Gaiwadi School ...	Benham-hall Lane, Girgaum ...	50	147 0 0
40	Israelite Jacob Circle „ ...	Jacob Circle	117	550 0 0
41	Kamathipura 3rd Lane „ ...	Kamathipura	60	112 0 0
42	Khattar Galli School	2nd Carpenter Lane, Khetwadi ...	34	90 0 0
43	Khetwadi Sutar Lane School ...	Khetwadi	81	147 0 0
44	M. E. Mission Duncan Road School	Duncan Road	27	58 0 0
45	Do. Madanpura School...	Morland Road, Madanpura ...	26	56 0 0
46	Do. Tarwadi „ ..	Tarwadi	29	94 0 0
47	Matunga Bazar Peth „ ...	Matunga	42	128 0 0

Appendix I—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on 31st March 1919.	Amount of Grant paid for 1918-19.
	Boys' Schools.—Ch. III—contd.			Rs. a. p.
48	Matunga Vincent School... ...	Vincent Road, Matunga	57	240 0 0
49	Mugbhat Vidya-vardhak School ...	Mugbhat Cross Lane	116	270 0 0
50	New Parelbhoiwada „ ...	Parel Bhoiwadi	69	147 0 0
51	Nutan Marathi Vidyalaya „ ...	Gavri Galli, Dongri	105	270 0 0
52	Sonapur Lane School	Sonapur Lane	81	127 0 0
53	Salvation Army Dhorchawl School..	Mahim	50	75 0 0
54	Do. Foras Road „	Foras Road	47	108 0 0
55	Do. Mahim Chawl „	Mahim chawl, Parel	60	144 0 0
56	Do. Byculla „	Byculla	25	73 0 0
57	Wesleyan Mission „ „	Do.	56	58 8 0
58	Do. DeLisle Road „	Parel	96	93 10 0
	Girls' Schools—Ch. III.			
59	D. C. Mission Parel Girls' School...	Parel	51	186 0 0
60	Khetvadi Sutar-Lane „ ...	Khetvadi	36	156 0 0
61	M. E. Mission Agripada „ ...	Jacob Circle	83	301 8 0
62	Seva Sadan Home Classes „ ...	Sandhurst Road..	34	191 0 0
	Marathi Night Schools.—Ch. IV.			
63	A. M. Jacob Circle Night School...	Jacob Circle	13	22 0 0
64	Deshastha Maratha Samaj Mandvi Night School.	Mandvi-Koliwada	44	81 0 0
65	Prarthana Samaj Crawford Market Night School	Crawford Market...	15	51 0 0
66	Do. Curry Road Night School	Curry Road	19	76 0 0
67	Do. Duncan Road „ ...	Duncan Road	10	38 0 0
68	Do. Girgaum Night School...	Girgaum Road	18	43 0 0
69	Do. Nalbazar „ ...	Nulbazar	20	128 0 0
70	Do. Parel „ ...	Parel	20	63 0 0
71	Do. Tardeo „ ...	Tardeo	5	38 0 0
72	S. S. League Aikya-Vardhak Night School	Byculla	19	51 0 0
73	Do. Tardeo new compound Night School	Tardeo	17	56 0 0
74	Do. Chikhalwadi „ ...	Chikhalwadi, Grant Road... ...	16	44 0 0
75	Do. Carroll Road „ ...	Carroll Road	32	38 0 0

Appendix I—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on 31st March 1919.	Amount of Grant paid for 1918 19.
	Marathi Night Schools—Ch. IV —contd.			Rs. a. p.
76	S. S. League Memonvada Night School	Memonwada	25	38 0 0
77	Do. Morarji Goculdas Free Night School.	Parel	35	64 0 0
78	Do. Mandvi-Koliwada ,,	Mandvi-Koliwada...	25	49 0 0
79	Do. Foras Road ,,	Foras Road	26	48 0 0
80	Do. Tardeo ,,	Tardeo	27	41 0 0
81	Do. Chinchpoogli ,,	Chinchpoogli	13	96 0 0
82	S. P. E M. Colaba ,,	Colaba	29	73 0 0
83	Yande A. V. Free ,,	Mugbhat Cross Lane	26	99 0 0
	Marathi School—Ch. VI.			
84	Seva Sadan Normal Classes (for girls)	Lamington Road	22	828 0 0
	Marathi Schools—Ch. VII.			
85	Prof. Date's Deaf-mute Institution	Zaoba's Wadi	27	1,200 0 0
85	Marathi Schools.	Total ...	6,047	28,007 14 0

GUJERATHI PRIMARY SCHOOLS.

	Boys' Schools—Ch. II.			Rs. a. p.
1	Bazar Gate School	Gunbow Street, Fort	75	396 0 0
2	Bhendi Bazar School	Erskine Road, Bombay No. 9 ...	324	917 0 0
3	Byramji Jeejibhai P.B. Institution.	Queen's Road, Bombay	116	972 0 0
4	Chandanwadi ,, ...	Princess Street	233	862 8 0
5	C. M. S. Jacob Circle ,, ...	Jacob Circle	54	300 0 0
6	David Sassoon Reformatory ,, ...	Matunga	43	362 8 0
7	Delisle Road, Parel ,, ...	DeLisle Road, Parel	72	256 8 0
8	Durgadevi School	Northbrook Street	213	899 0 0
9	Esplanade High School ...	Fort	181	1,000 0 0
10	Fort Model School	Opposite Fire Brigade Station, Fort	27	240 0 0
11	Framji N. Petit School ...	Khetwadi	158	793 8 0
12	Gokuldas Tejpal Seminary ...	Mandvi	150	950 0 0
13	Grant Road School	Grant Road	162	715 0 0

Appendix I—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on 31st March 1919.	Amount of Grant paid for 1918-19.
				Rs. a. p.
	Boys' Schools—Ch. II—contd.			
14	Imami Ismaili Khoja Jamat School	Chinch Bunder	230	1,050 0 0
15	Jeejeebhai Dadabhai Charity School	Khetwadi, 12th Lane	101	600 0 0
16	Lady Northcote Hindu Orphanage..	Chinchpoogli	109	787 8 0
17	Master Kanji Karamsi Mandvi School	Dongri Street, Mandvi	145	849 0 0
18	M. E. Mission, Colaba	Colaba	30	105 0 0
19	National English School ...	Bombay No. 2	128	576 0 0
20	New Parel School	Sun Mill Road	72	300 0 0
21	New Mazgaon School	Gunpowder Road, Mazagaon ...	113	537 8 0
22	Parsee Seminary	Nagdevi Street	127	625 0 0
23	Parel Boys' School	Parel Suparibaug Road	75	407 8 0
24	Parel Road A. V. School ...	Parel Road	210	774 0 0
25	Fort and Proprietary Fort School..	Fort	108	721 8 0
26	Do. Chandanwadi „	Chandanwadi	105	660 0 0
27	Do. Govalia Tank „	Grant Road	202	1,368 0 0
28	Shree Karunashankar School ...	Dhobi Talao	154	1,050 0 0
29	Sir J. J. P. B. Institution, Fort School...	Fort	159	969 8 0
30	Do. do. Princess Street School	Dhobi Talao	80	680 0 0
31	Star Primary School	Khetwadi	81	320 0 0
32	Tutorial High „	Gowalia Tank	419	2,000 0 0
	Girls' Schools—Ch. II.			
33	Alexandra Native Girls' Institution	Waudby Road, Fort	99	950 0 0
34	Britania Girls' School	Proctor Road, Grant Road ...	113	944 0 0
		5 per cent. Supple. grant ...	...	47 3 0
35	Durgadevi Girls' „	Northbrooke Street	71	200 0 0
36	Empress High „	Chandanwadi	35	250 0 0
37	Fort Zoroastrian „	Gunbow Street, Fort	68	310 0 0
		5 per cent. Supple. grant ...	...	15 8 0
38	Goculdas Tejpal „	Hornby Road, Fort	138	1,243 8 0
		5 per cent. Supple. grant ...	...	62 2 0

Appendix I—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on 31st March 1919.	Amount of Grant paid for 1918-19.
	Girls' Schools—Ch. II—contd.			Rs. a. p.
39	Grant Road Boys' and Girls' School	Lamington Road	58	250 0 0
40	Hardinge Girls' School	Charni Road Junction	42	400 0 0
41	Imami Ismaili Khoja Jamat Girls' School	Chinch Bunder	358	1,375 0 0
		5 per cent. Supple grant ...	...	68 12 0
42	Ismaili Kandi Mohalla Girls' School	Jail Road, Umerkhadi	168	572 8 0
		5 per cent. Supple. grant ...	...	28 10 0
43	Khetwadi Zarthosti School ...	Noble Building, Khetwadi ...	158	700 0 0
		5 per cent. Supple. grant ...	...	35 0 0
44	Mangrol Jain Sabha „ ...	Pydhoni	147	804 0 0
		5 per cent. Supple. grant ...	...	40 3 0
45	Merwanji Seth Girls' „ ...	Charni Road Junction	64	370 0 0
46	Miss Bennett's „ „ ...	Khetwadi 7th Lane	75	427 8 0
		5 per cent. Supple. grant ...	...	21 6 0
47	New Mazagaon „ „ ...	Gunpowder Road, Mazagaon ...	62	450 0 0
		5 per cent. Supple. grant ...	...	22 8 0
48	Parsi Girls' Schools Association's Parsi Bazar Girls' School ...	Parsi Bazar, Fort...	187	1,112 8 0
		5 per cent. Supple. grant ...	...	55 10 0
49	Do. Chandanwadi „ ...	Princess Street	264	1,460 0 0
		5 per cent. Supple. grant ...	...	73 0 0
50	Peraj Padamsi Girls' „ ...	Vadgadi	119	600 0 0
		5 per cent. Supple. grant ...	...	30 0 0
51	Princess High „ ...	New Queen's Road	83	450 0 0
		5 per cent. Supple. grant ...	...	22 8 0
52	Bai Ratanbai Panday „ ...	Gilder Street, Tardeo	231	1,800 0 0
		5 per cent. Supple. grant ...	...	90 0 0
53	Sir Cowasji Jehangir Khetwadi Girls' School	Khetwadi	159	1,040 0 0
		5 per cent. Supple. grant ...	...	52 0 0

Appendix I—*continued.*

Serial No.	Name of School.	Locality.	No. of pupils on 31st March 1919.	Amount of Grant paid for 1918-19. Rs. a. p.
	Girls' Schools—Ch. II—concld.			
54	Sir J. J. P. B. Hornby Road Girls' School	Fort	174	1,214 8 0
		5 per cent. Supple. grant ...	...	60 11 0
55	Sir J. J. P. B. Princess Street Girls' School	Princess Street	137	1,059 8 0
		5 per cent. Supple. grant ...	...	52 15 0
56	Do. Parel Girls' „	Parel	123	735 0 0
		5 per cent. Supple. grant ..	...	36 12 0
57	Sir Mangaldas Nathubhai Girls' „	Sandhurst Road	89	445 0 0
		5 per cent. Supple. grant ...	..	22 4 0
58	Young Ladies' High School ...	Hornby Road, Fort	115	1,031 8 0
		5 per cent. Supp'e. grant ...	...	51 9 0
	Boys' Schools—Ch. III.			
59	D. C. Mission Babula Tank School	Babula Tank	62	200 0 0
60	Do. Ram Mohan Day School	Mahaluxmi	95	200 0 0
61	M. E. Mission, DeLisle Road School	DeLisle Road	42	66 0 0
	Girls' Schools—Ch. III.			
62	C. M. S. Mahaluxmi Girls' School	Mahaluxmi	43	122 0 0
	Night Schools—Ch. IV.			
63	H. M. H. I. Sohani Free Night School	Jakeria Musjid	68	162 0 0
64	D. C. M. Mahaluxmi Ram Mohan Night School	Mahaluxmi	37	29 0 0
64	Gujerathi Schools	Total for Gujerathi Schools ...	8,141	44,906 9 0

Appendix I—*continued.*

URDU SCHOOLS.

No.	Name of School.	Locality.	No. of pupils on 31st March 1919.	Amount of Grant paid for 1918-19. Rs. a. p.
	Boys' Schools—Ch. II.			
1	Halai Memon Moholla Minar Musjid School	Memonwada	345	1,800 0 0
2	Sk. Madress-I-Mahomedia School...	Musjid Street	122	700 0 0
3	Bai Padmabi Koran Shariff ,, ...	Chakla Street Corner	56	425 0 0
	* *	* *		
	Girls' Schools – Ch. II.			
4	H. M. H. I. Subhani Purdah Girls' School.	Jakeria Musjid Street	270	1,350 0 0
		5 per cent. Supple. grant ...		67 8 0
	Boys' Schools—Ch. III.			
5	Hanifa Urdu Free School ...	Falkland Road	106	147 0 0
6	S. P. G. Mission Sankli Street School.	Byculla	15	46 0 0
	Girls' Schools—Ch. III.			
7	Luckmanji Sulemanji Girls' School.	Pakmodia Street, Grant Road ...	324	700 0 0
	Night Schools—Ch. IV.			
8	S. S. League Chhatrisarang Night School.	Chhatrisarang Street	55	54 0 0
9	Do. New Nagpada School.	New Nagpada	54	24 0 0
9	Urdu Schools.	Total ...	1,317	5,313 8 0

Note.—Total of Urdu schools is 11 including 2 Anjuman-I-Islam schools, given at the top of the list.

	Tamil Schools—Ch. III.			Rs. a. p.
1	S. P. G. Mission Anglo-Tamil School.	Dharawi	54	134 0 0
1		Total ...	54	134 0 0
	Hindi Schools.			
1	Marwadi Vidyalaya	Sandhurst Road	108	800 0 0
2	Do. Commercial School ...	Fanaswadi	99	700 0 0
2		Total for Hindi ...	207	1,500 0 0

Appendix I—*concluded.*

N. B.—The above are grants for 1918-19. In addition to them, the following grants for 1917-18 were also paid during the year 1918-19, the sums being either monies remaining incidentally unpaid or being grants sanctioned after the expiry of the year:—

	Name of School.	Grant for 1917-18.		
		Rs.	a.	p.
1.	M. E. Mission, Agripada Marathi Girls' School	43	0	0
2.	Imami Ismaili Khoja Jamat Gujerathi Girls' School ...	57	8	0
3.	Ismaili Kandi Moholla Gujerathi Girls' School	17	4	0
4.	Miss Bennet's Gujerathi Girls' School	20	12	0
5.	Parsi Girls' School Association Parsi Bazar Girls' School ...	51	4	0
6.	Do. Do. Do. Chandanwadi „ „ ...	56	0	0
7.	Bai Ratanbai Panday Gujerathi Girls' School	59	8	0
8.	Sir Cowasji Jehangir Gujerathi Girls' „	34	0	0
9.	Sir J. J. P. B. Hornby Road „ „	50	0	0
10.	Do. Princess Street „ „	51	0	0
11.	Do. Parel Gujerathi Girls' School...	15	0	0
12.	H. M. H. I. Sobhani Purdah Girls' Urdu School	52	8	0
	Total Rupees ...	511	12	0

Total Grant for 1918-19 :—

		Rs.	a.	p.
2	Anjuman Islam Schools	5,000	0	0
85	Marathi Schools	28,007	14	0
64	Gujerathi „	44,906	9	0
9	Urdu „	5,313	8	0
1	Tamil School	134	0	0
2	Hindi Schools	1,500	0	0
	Total ...	Rs. 84,861	15	0
	Add—Grant for 1917-18 paid in 1918-19.	511	12	0
	Total ...	Rs. 85,373	11	0

THE SCHOOLS COMMITTEE'S OFFICE,
BOMBAY, *25th August* 1919.

D. G. PADHYE,
Secretary, Schools Committee.

MUNICIPAL OFFICE,
BOMBAY, 23*rd May* 1919.

From

THE MUNICIPAL AUDITORS,
BOMBAY.

To

THE MUNICIPAL SECRETARY,
BOMBAY.

SIR,

In accordance with Section 137 of the Bombay Municipal Act of 1888, we have the honour to forward herewith three Appendices, marked "A," "B" and "C," containing the result of the scrutiny of the outstanding bills of Rates and Taxes which were in the hands of the Ward Clerks and in the Office of the Assessor and Collector on the 31st March 1919.

2. These Appendices form part of the Annual Report on the Municipal Accounts for the year 1918-19, now under preparation.

3. We beg to add that some of the bills included in these Appendices were certified by the Assessment Department to have been paid on or after the 1st April 1919, and were therefore not placed before us for scrutiny.

We beg to remain,
Sir,
Your most obedient servants,
H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

Appendix A.

STATEMENT of outstanding bills of Rates and Taxes in the hands of the Ward Clerks and in the office of the Assessor and Collector on the 31st March 1919.

Wards	No. of Bills.	Amount.									Grand Total.	Remarks.
		On value.				Compounded or Special.			Tax on Vehicles and Animals.	Meter hire.		
		General Tax.	Water Tax.	Halalkhore Tax.	Total.	Compound water service.	Special Halal-khore Service.	Water charged by meter.				
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
					For the year 1918-19.							
A	438	19,535 5 10	3,406 14 5	5,963 3 10	28,906 8 1	42 0 0	.....	899 12 10	3,794 5 4	7 0 0	33,649 10 3	
Govt. Port Trust and Railway Section.	68	3,929 9 8	1 15 2	1,381 0 3	5,302 9 1	.....	3,950 14 5	18,815 2 4	264 0 0	45 0 0	28,377 9 10	Two bills aggregating Rs. 454-11-0 are reported to have been sent in original to the Officer Commanding Marine Lines War Hospital extension, and were therefore not submitted for inspection.
C.I. Trust Sect.	154	9,493 9 6	1,909 8 11	2,020 13 5	13,423 15 10	.....	.....	3,047 5 3	124 0 0	7 0 0	16,601 5 1	
B	239	29,206 8 3	8,708 3 0	8,875 4 8	46,789 15 11	4 0 0	.....	651 9 3	602 0 0	.....	48,047 9 2	
C	162	10,576 1 9	3,177 6 11	3,198 3 11	16,951 12 7	1 0 0	.....	.....	412 0 0	.....	17,364 12 7	
D	315	12,510 15 6	2,838 6 9	3,882 5 9	19,231 13 0	1 0 0	227 14 1	1,017 6 3	2,478 5 4	50 0 0	23,006 5 8	
E	238	3,831 13 9	1,625 5 6	1,680 8 2	7,137 11 5	0 8 0	.....	981 15 3	1,907 10 8	.....	10,027 13 4	
F	31	414 9 9	96 6 7	119 3 1	630 3 5	.....	.....	433 14 0	31 0 0	10 0 0	1,105 1 5	
G	46	576 15 11	100 13 7	103 9 8	581 7 2	.....	.....	.....	205 0 0	.....	786 7 2	
Total ...	1,691	89,866 9 11	21,865 0 10	27,224 4 9	1,38,955 15 6	48 8 0	4,178 12 6	25,847 1 2	9,818 5 4	119 0 0	1,78,967 10 6	

MUNICIPAL OFFICES,
Bombay, 23rd May, 1919.

H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

Appendix B.

STATEMENT of outstanding bills of Rates and Taxes for the year 1917-18, and previous years in the hands of the Ward Clerks and in the office of the Assessor and Collector on the 31st March 1919.

Wards.	No. of Bills.	Amount.									Remarks
		On Value.				Compounded or Special.			Tax on Vehicles and Animals.	Grand Total.	
		General Tax.	Water Tax.	Halalkhore Tax.	Total.	Compound Water Service.	Special Halalkhore Service.	Water charged by Meter.			
		Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	
					For the year 1917-18.						
A	66	758 2 0	233 5 9	14 13 8	1,006 5 5	.....	.....	.....	482 10 8	1,489 0 1	
B	2	107 14 2	32 12 5	32 12 5	173 7 0	.....	.....	.....	15 0 0	188 7 0	
C	5	1 12 6	.....	.....	1 12 6	.....	.....	.....	38 0 0	39 12 6	
D	8	90 13 8	.....	27 9 8	118 7 4	.....	.....	.....	75 10 8	194 2 0	
E	4	114 8 10	34 12 10	34 12 10	184 2 6	.....	.....	43 11 0	8 0 0	235 13 6	
F	1	.....	.....	.....	.....	.....	.....	.....	223 0 0	223 0 0	
G	2	0 11 10	.....	.....	0 11 10	.....	.....	.....	8 0 0	8 11 10	
Total ...	88	1,073 15 0	300 15 0	110 0 7	1,484 14 7	.....	.....	43 11 0	850 5 4	2,378 14 11	
					For the year 1916-17.						
A	6	.....	.....	.....	.....	.....	.....	.....	48 0 0	48 0 0	
D	2	48 2 3	.....	15 4 10	63 7 1	.....	.....	.....	.....	63 7 1	
Total ...	8	48 2 3	.....	15 4 10	63 7 1	.....	.....	.....	48 0 0	111 7 1	
					For the year 1915-16.						
D	1	1 5 9	.....	0 12 0	2 1 9	.....	.....	.....	.....	2 1 9	
GRAND TOTAL.	97	1,123 7 0	300 15 0	126 1 5	1,550 7 5	.....	.....	43 11 0	898 5 4	2,492 7 9	

MUNICIPAL OFFICES,
Bombay, 23rd May 1919.

H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

Appendix C.

SUMMARY of Appendices A and B.

Year.	Appendix A.		Appendix B.		Grand Total.	
	Number of bills.	Amount.	Number of bills.	Amount.	Number of bills.	Amount.
		Rs. a. p.		Rs. a. p.		Rs. a. p.
1918-19	1,691	1,78,967 10 6	.....	.....	1,691	1,78,967 10 6
1917-18	.....	.....	88	2,378 14 11	88	2,378 14 11
1916-17	.....	.....	8	111 7 1	8	111 7 1
1915-16	.....	.....	1	2 1 9	1	2 1 9
Total ..	1,691	1,78,967 10 6	97	2,492 7 9	1,788	1,81,460 2 3

NOTE.—The outstanding amount on the same date last year, *i.e.*, on the 31st March 1918, was Rs. 68,127-7-10.

MUNICIPAL OFFICES,
Bombay, 23rd May 1919.

H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

BOMBAY, 23*rd September* 1919.

From

THE MUNICIPAL AUDITORS,

BOMBAY.

To

THE MUNICIPAL SECRETARY,

BOMBAY.

SIR,

We have the honour to forward herewith our Report on the accounts of the Schools Committee for the year 1918-19.

We have the honour to be,

Sir,

Your most obedient servants,

H. S. KATRAK,

BHUKHANDAS B. DESAI,

Municipal Auditors.

REPORT ON THE ACCOUNTS OF THE "SCHOOL FUND" FOR THE YEAR 1918-19.

In accordance with the Bye-law No. 14 of the Schools Committee, we beg to report that we have audited the accounts, examined all the vouchers, relating to the Receipts and Disbursements of the "School Fund" in charge of the Schools Committee from the 1st April 1918 to the 31st March 1919, and found them in order. Some irregularities, found in the course of the Audit of the Accounts and vouchers, will be reported to the Secretary of the Schools Committee for note and necessary action.

2. The total receipts of the "School Fund" during the year 1918-19 amounted to Rs. 8,83,348-12-8 against Rs. 6,90,070-12 0 for the year 1917-18. The excess of Rs. 1,93,278-0-8 is due mainly to increase in the contribution from the General Municipal Fund and the amount of school fees.

3. The total expenditure during the year 1918-19 amounted to Rs. 8,53,437-7-7 against Rs. 6,95,243-8-4 in the year 1917-18. The increase of Rs. 1,58,193-15-3 was due to the increase in the number of schools and pupils, as explained by the Secretary, Schools Committee, in his Annual Administration Report for the year 1918-19.

4. As will be seen from paras. 2 and 3 above, the total receipts during the year were greater than the total outgoings by Rs. 29,911-5-1.

5. The expenditure under some of the heads of account exceeded the Budget Grants sanctioned for them. The total excess amounted to Rs. 23,381-4-1, which sum is proposed to be met by re-appropriation from savings under the grants for other heads of expenditure.

6. The total assets and workable balance of the "School Fund" on the 31st March 1919 were Rs. 61,319-6-1 and Rs. 44,066-2-5 respectively as shown below :—

			Rs.	a.	p.
Advances recoverable			230	0	0
Government Promissory Notes being Security Deposits of Contractors kept for safe custody with the Bank of Bombay (nominal value)			2,200	0	0
Government Promissory Notes and other Securities belonging to Prize and other Funds, deposited with the Bank of Bombay for safe custody			52,000	0	0
Government Promissory Notes of the nominal value of Rs. 11.200 on account of investment of Surplus Cash Balance of the "School Fund" kept with the Bank of Bombay for safe custody (actual value)			10,801	0	0
Cash Balances—					
(*a*) In the Bank of Bombay	Rs.	38,591 9 11			
(*b*) In the Office Treasury	„	1,562 14 7			
			40,154	8	6
Deduct – Total amount of Assets ...			1,05,385	8	6
Total liabilities.					
(*a*) Amount of Prize, &c., Funds ...	Rs.	53,490 15 5			
(*b*) Amount of Deposits	„	7,828 6 8			
			61,319	6	1
Total amount of workable balance ...			44,066	2	5

7. The balance in the Pass Book of the Bank of Bombay was verified by us and found correct, and the safety receipts for the Government Paper, &c., lodged with the Bank of Bombay were examined and found to be in order. The cash balance in the office treasury was counted by us and found correct.

H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

BOMBAY, *22nd September* 1919.

BOMBAY, 19*th September* 1919.

From

THE MUNICIPAL AUDITORS,
BOMBAY.

To

THE MUNICIPAL SECRETARY,
BOMBAY.

SIR,

We have the honour to forward herewith our report on the Municipal Accounts for the year 1918-19 with a view to the same being printed and submitted to the Corporation as usual.

We have the honour to be,
Sir,
Your most obedient servants,
H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

REPORT OF THE AUDITORS OF MUNICIPAL ACCOUNTS FOR THE YEAR 1918 1919.

For the audit of the accounts under review, Khan Saheb H. S. Katrak and Mr. B. B. Desai were appointed Auditors as per Corporation Resolution No. 7863, dated the 28th February 1918, and Corporation Resolution No. 8028, dated the 7th March 1918.

2. As usual, all vouchers and papers relating to both Receipts and Disbursements for the year 1918-19 were examined with the Day Books, and the postings in the Ledger were also checked with the entries in the Day Books and Journal Sheets.

3. The weekly statements of Receipts and Charges of the Municipal Fund were examined, as they were prepared, prior to their publication in the *Bombay Government Gazette*.

4. The number of vouchers, relating to the accounts of the year under review, compares with those of the previous year as follows:—

	1917-18.	1918-19.	Decrease.
Receipt Vouchers	41,168	40,388	780
Disbursement Vouchers	86,828	83,771	3,057
	127,996	124,159	3,837

Thus there was a decrease of 3 per cent. in the number of Vouchers for the year under report.

5. The result of the year, compared with the Budget and the Revised Estimates and the actuals of the previous year, has been summarized below:—

	1917-18.	1918-19.		
	Actuals.	Budget.	Revised.	Accounts.
	Rs.	Rs.	Rs.	Rs.
Revenue and Receipts	1,48,29,386	1,52,37,850	1,70,51,850	1,73,74,185
Expenditure	1,42,61,391	1,52,80,907	1,76,53,096	1,70,26,649
Surplus + ...	5,67,995	.....	.....	3,47,536
Deficit —	.....	43,057	6,01,246	.....
Unexpended Budget grant renewed in the next year.	11,17,198	.....	.....	13,67,073

6. The total Receipts during the year under review were better than those of the previous year by Rs. 25,44,799, the increase being chiefly under Property Taxes, Miscellaneous Receipts, and Interest and Profit on investments of Surplus Loan and other balances. The actuals also exceeded the Budget and the Revised Estimates by Rs. 21,26,335 and Rs. 3,22,325 respectively.

7. The total expenditure during the year under review amounted to Rs. 1,70,26,649 against Rs. 1,42,61,391 in the previous year, resulting in an increase of Rs. 27,65,258. The principal items which contributed to this large increase were the Public Works Department, the Health Department, Markets and Slaughter Houses, Primary Education, Grain Compensation and War Allowance, Contribution to the City Improvement Trust, Debt and depreciation of Government Paper held in Surplus Funds. The result of the year was worse than the Budget by Rs. 17,45,742 but was better than the Revised by Rs. 6,26,447.

8. The budget anticipated a deficit of Rs. 43,057 which was increased to Rs. 6,01,246 in the Revised. The actuals have, however, resulted in a surplus of Rs. 3,47,536. Taking into account, however, the increase in outstanding liabilities on account of grants renewed, and in payment to the City Improvement Trust, the above surplus has been converted into a deficit of Rs. 2,69,451 (*vide* Appendix 3 of the Chief Accountant's report).

9. The outstanding charges (unexpended budget grants required to be renewed) for 1918-19 and previous years amounted to Rs. 13,67,073 against Rs. 11,17,198 in the previous year, or an increase of Rs. 2,49,875. If the whole amount of these outstanding charges had been spent during the year, the results of the year would have been worse than those anticipated in the Revised.

10. The total expenditure for the last six years, compared with the outstanding charges for those years are as follows :—

Years.	Total expenditure.	Unexpended budget grants.	Percentage of unexpended budget grants to total expenditure.
	Rs.	Rs.	Rs.
1913-14	1,20,48,926	10,08,232	8·
1914-15	1,24,53,191	10,65,310	8·5
1915-16	1,28,03,870	9,98,762	7·8
1916-17	1,42 14,292	8,69,495	6·1
1917-18	1,42,61,391	11,17,198	7·8
1918-19	1,70,26,649	13,67,073	8 03

From the above figures it would be seen that the amount of outstanding charges was the lowest in 1916-17, while in the other years it was on an average 8 per cent. of the total expenditure. We would respectfully suggest that when the amounts of renewed grants are large, the budget estimates for the following year may be curtailed, as far as possible, to avoid a further increase. For instance under "New Works" met out of Revenue, the outstanding charges at the end of 1918-19 amounted to Rs. 2,98,927, grants for which have been renewed during 1919-20, and a budget provision of Rs. 2,50,510 has been made for the year 1919-20 under this head. Thus the total amount available for expenditure in the year 1919-20 is Rs. 5,49,437, while a review of the expenditure under this head for previous years shows that the charges during a year have not exceeded Rs. 2,50,000. It is possible, therefore, that about as much as Rs. 3,00,000 will remain unspent at the end the year.

11. The opening Cash Balance on the 1st April 1918 was Rs. 5,75,272-11-10. This together with the total receipts of the year, including Debt, Deposits, Advances, etc, amounted to Rs. 7,89,82,791-9-1. The gross payments during the year amounted to Rs. 7,84,60,496-0-8, thus leaving a balance of Rs. 5,22,295-8-5 on the 31st March 1919.

12. A list of charges, sanctioned by the Municipal Commissioner and paid during the year 1918-19 out of his Discretional Contingent Grant is herewith appended.

13. *Loans.*—During the year under review the Government of India sanctioned the raising of a loan of Rs. 30,00,000 on the security of 12 months' bills from the Bank of Bombay. This money was borrowed from the Bank at a discount of 5¼ per cent. free of Income Tax to the Bank in sums of Rs. 10,00,000 in October, November and December 1918. The interest and Income Tax on it, deducted by the Bank, amounted to Rs. 1,67,343-12-0, in other words the rate of discount amounted to Rs. 5-9-3 per cent. This charge has been debited in the accounts of the year under review to the Suspense head "Advances Recoverable," pending its adjustment during the current year, *i.e.*, in the accounts of 1919-20 to the debit of "Interest" against the provision made in the estimates for that year.

14. *Sinking Funds.*—In accordance with the instructions contained in the Corporation Resolution No. 5294, dated the 19th November 1888, all investments made during the year under report, on account of Sinking Funds pertaining to all the several Loans due by the

Municipality were examined and found to agree with the amounts provided in the Budget for the year. The total accumulated balances on account of all Sinking Funds amounted to Rs. 2,14,19,973-10-4 on the 31st March 1919 (Rs. 2,14,19,069-11-0 in Securities of the nominal value of Rs. 2,10,47,000 and £25,000 = Rs. 3,75,000, as shown below and Rs. 903-15-4 in cash).

	Nominal Value.			Actual Value.		
	Rs.	a.	p.	Rs.	a.	p.
5 per cent. Municipal Debentures ...	36,60,500	0	0	36,60,500	0	0
4 per cent. do. do. ...	1,03,13,500	0	0	1,0313,368	2	0
4 per cent. Bombay Port Trust Bonds...	5,53,000	0	0	5,53,000	0	0
4 per cent. Bombay Improvement Trust Bonds	28,86,500	0	0	28,83,701	9	0
4 per cent. do. do. Sterling Bonds. ...	3,75,000	0	0	3,75,000	0	0
4 per cent. Government Conversion Loan of 1916-17	24,00,000	0	0	24,00,000	0	0
5½ per cent. Government Paper—Indian War Bonds of 1920	12,33,500	0	0	12,33,500	0	0
Total Rs. ...	2,14,22,000	0	0	2,14,19,069	11	0
Amount in Current Accounts with the Bank of Bombay.	.....			903	15	4
Grand Total	2,14,22,000	0	0	2,14,19,973	10	4

15. The safety receipts, given by the Bank of Bombay for the above Securities in its custody were examined and found to be in order, and the cash balances on account of the said Sinking Funds, as shown in the Bank's Pass Books, were also verified and found correct.

16. *Advances.*—The balance outstanding on the 31st March 1919 under the head "Advances—Personal Account of Municipal Officers" was Rs. 40,505-7-2 against Rs. 36,066-14-11 on the same date last year. The former sum includes Rs. 6,221 on account of Permanent Advances to Municipal Officers and the remaining sum of Rs. 34,284-7-2 stands debited to "Advances" pending adjustment in the accounts.

17. The balances on the 31st March 1919 under the heads, noted below, compare with those on the same date of the preceding year as under:—

	1917-18.			1918-19.		
	Rs.	a.	p.	Rs.	a.	p.
Departmental works	6,008	7	4	27,782	1	11
Private works	40,370	10	8	74,477	4	9
Workshops	97,890	12	9	77,521	0	7
Total Rs. ...	1,44,269	14	9	1,79,780	7	3

18. The balance on 31st March 1919, under the head "Personal Account of Municipal Contractors" for supplies and services rendered to them and for recoveries due from the defaulting contractors, was Rs. 389-6-2 against Rs. 1,351-12-6 at the close of the year 1917-18.

19. The balance under "Miscellaneous Advances" on the 31st March 1919 was Rs. 10,31,578-1-1 as shown below, against Rs. 12,19,961-4-0 on the same date last year:—

	Rs.	a.	p.
Miscellaneous Advances	2,50,986	9	4
Printing and Stamping Building and Repair Certificate Forms	131	9	4
New Works to be subsequently provided for under a new Loan	5,99,213	3	10
War Measures—Rent Relief	1,852	10	11
Do. —Relief to poor—Municipal Grain Shops	12,050	3	8
Interest including Income Tax paid on the 12 months' bills loan of 30 lakhs, borrowed from the Bank of Bombay, in advance to be met out of the provision for interest made in 1919-20	1,67,343	12	0
Total ...	10,31,578	1	1

20. *Plague Charges.*—Rs. 1,26,506 were expended on account of Plague Charges out of the current revenue during the year 1918-19. The amount expended on this account in the preceding year was Rs. 1,32,160. The total expenditure from the commencement of the Plague, *i.e.*, from the year 1896-97 to the 31st March 1919 amounted to Rs. 84,86,063.

INVESTED BALANCES.

21. *Surplus Revenue Funds.*—The Surplus Fund investments on the 31st March 1919 were Rs. 66,07,574-14-0 as per the following details against Rs. 56,65,435-9-3 on the same date last year :—

		Rs.	a.	p.
(*a*)	In Government, &c., Papers with the Bank of Bombay (face value Rs. 36,03,700)	30,14,445	8	0
(*b*)	In *Current Account* with the following Banks :—			
	Bank of Bombay	100	0	0
	Hongkong & Shanghai Banking Corporation	75,705	6	11
	Comptoir National D'Escompte de Paris	80,542	10	0
	Chartered Bank of India, Australia & China	1,26,039	11	2
	National Bank of India, Limited	154	6	0
	Yokohama Specie Bank, Limited	50,579	2	11
	Mercantile Bank of India, Limited	56,287	13	0
	Bank of India, Limited	1,83,365	12	5
	Eastern Bank, Limited	2,20,354	7	7
	Total ...	7,93,129	6	0
(*c*)	In *Fixed Deposits* with the following Banks :—			
	Bank of India, Limited	3,00,000	0	0
	Eastern Bank, Limited	1,00,000	0	0
	Central Bank of India, Limited	5,00,000	0	0
	Chartered Bank of India, Australia and China	5,00,000	0	0
	National Bank of India, Limited	5,00,000	0	0
	Comptoir National D'Escompete de Paris	9,00,000	0	0
	Total ...	28,00,000	0	0
	Grand Total ...	66,07,574	14	0

22. *Surplus Loan Funds.*—The balance of the invested amount of the several Loan Funds on the 31st March 1919 was Rs. 17,42,223-13-9 as per the following details against Rs. 9,52,257-5-9 on the same date last year :—

		Rs.	a.	p.
(*a*)	In *Current Account* with the following Banks :—			
	Hongkong & Shanghai Banking Corporation	2,188	8	7
	Chartered Bank of India, Australia & China	50,351	0	10
	Yokohama Specie Bank, Limited	4,369	15	3
	Mercantile Bank of India, Limited	1,00,782	0	0
	Bank of India, Limited	3,274	3	1
	Eastern Bank, Limited	75,796	9	6
	Comptoir National D'Escompte de Paris	4,368	5	6
	Central Bank of India, Limited	1,01,093	3	0
	Total ...	3,42,223	13	9
(*b*)	In *Fixed Deposits* with the following Banks :—			
	Bank of India, Limited	7,00,000	0	0
	Mercantile Bank of India, Limited	3,50,000	0	0
	Yokohama Specie Bank, Limited	3,50,000	0	0
	Total ...	14,00,000	0	0
	Grand Total ..	17,42,223	13	9

23. *Reserve Funds.*—The balances of the several Reserve Funds, detailed below, amounted to Rs. 16,50,304-10-9 on the 31st March 1919 (Rs. 16,50,020-3-0 in securities of the nominal value of Rs. 17,17,600 as shown below, and Rs. 284-7-9 in cash).

	Nominal Value.	Actual Value.	Cash in the current account with the Bank of Bombay.
	Rs.	Rs. a. p.	Rs. a. p.
Municipal Fire and Accident Insurance Fund	2,74,200	2,70,168 2 0	140 7 10
Worn-out Water Mains Renewal Fund.	6,49,400	6,38,679 7 0	38 3 2
Municipal Land and Building Fund...	3,59,600	3,56,314 0 0	21 9 8
Net Premia Fund	4,34,400	3,84,858 10 0	84 3 1
Total Rs. ...	17,17,600	16,50,020 3 0	284 7 9

24. The safety receipts, given by the Bank of Bombay for the above securities in its custody, were examined and found to be in order, and the cash balances in current accounts with the several Banks have been compared with the Pass Books and found correct. The fixed deposit receipts of the several Banks were also examined and found to be in order.

25. The safety receipts for Government and other securities aggregating Rs. 3,76,200, received from the Municipal employés and contractors and those belonging to the several Memorial funds and lodged with the Bank of Bombay, were examined and found to be in order. The securities other than Government Paper, furnished by the Municipal employés, were also examined with the Registers maintained in the office of the Chief Accountant.

26. For the scrutiny of the outstand ng bills of rates and taxes for the year 1918-19, a reference is requested to the Auditors' letter, dated the 23rd May 1919, and to the appendices attached to that letter, from which it will be seen that the number of outstanding bills on 31st March 1919 was 1,788 of the total value of Rs. 1,81,460-2-3 against 778 of the total value of Rs. 68,127-7-10 on the 31st March 1918.

27. The balance of stock in hand on the 31st March 1919 as per the books of the Chief Accountant, compared with that of the preceding year, was as follows:—

Department.	1917-18.	1918-19.
	Rs. a. p.	Rs. a. p.
Executive Engineer's Department	933 6 0	1,076 11 0
General Stores Department.		
General Stores	5,87,969 10 11	5,75,906 6 7
Surplus and Obsolete Stores	3,485 4 0	2,571 14 10
Line Suspense Account	1,01,396 12 4	1,02,061 11 4
Total Rs. ...	6,92,451 11 3	6,80,540 0 9
Stores (Sales)	23,126 2 1	15,687 9 7
Water Works Imprest	4,918 11 4	5,344 7 7
Stock Adjustment Account	—1,938 0 11	—5,037 15 0
Total Rs. ...	26,106 12 6	15,994 2 2
Grand Total Rs. ...	7,19,491 13 9	6,97,610 13 11

28. In accordance with the instructions contained in para. XXIX of the Stores and Stores Audit Manual, a balance sheet of the General Stores Department has been prepared in the form prescribed in Appendix O of the Manual, wherein two sets of figures have been given, one set from the books of the Chief Accountant and the other from the Balance Sheet of the Storekeeper. The difference in the balances, as shown in the two sets of figures, has been explained by a footnote in the statement annexed hereto.

H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

BOMBAY, 19*th September* 1919.

Statement of charges sanctioned and paid out of the Commissioner's Discretional Contingent Grant during the year 1918-19 :—

Serial No.	Sanctioning Authority.	Particulars.	Amount.	Remarks.
			Rs. a. p.	
1	Commissioner's No. 547 of 10th April 1918.	Payment of Mr. Higgin's salary as Special Officer (Halalkhore Branch) for 3 months from 1st April 1918 to 30th June 1918.	1,050 0 0	
2	Commissioner's No. E. G. 2252 of 10th May 1918.	Payment of arrears of Government dues and fine in connection with the transfer of certain land in the name of the Municipality at the junction of Worlee Road and Purbhadevi Road.	36 14 9	
3	Standing Committee Resolution No. 806 of 1st May 1918.	Write-off of an irrecoverable bill for carrying out the work of remodelling a house gully at premises Nos. 117–119, Huzaria Street.	58 10 6	
4	Municipal Commissioner's Order, dated 12th June 1918.	Payment to the *Times of India* for the supply of 300 copies of Office Manual Part I.	332 8 0	
5	Standing Committee Resolution No. 2551 of 12th July 1918.	Payment of a claim for damage caused to the Taxi Cab of Mr. A. C. Warner and another owing to the alleged negligence of the Municipality in not keeping proper lights at an excavation in Fort Street.	500 0 0	
6	Commissioner's No. E. G. 6538 of 11th August 1917.	Payment of rent to the City Improvement Trust for plot No. 53 at Sandhurst Road, taken up for erection of a School and Dispensary.	54 13 4	
7	Commissioner's endorsement, dated 8th August 1918.	Payment on account of rewards distributed among the Police Officers, engaged in investigating the Municipal fraud case, against the Mukadams Sitaram Govind and Sonoo Hirapji and Laxuman Shamrao, the Contractor's Agent.	500 0 0	
8	Commissioner's Orders, dated 9th August 1918.	Cost of staff employed on the work of dismantling the sheds at Pawai.	502 14 0	
9	Municipal Commissioner's No. E. M. 169 of 13th August 1918.	Cost of special repairs to a Motor Lorry necessitated by an accident with the Port Trust Railway Engine.	600 0 0	
10	Municipal Commissioner's No. E. G. 304 of 28th November 1918.	Payment of premium on War Bonds of the face value of Rs. 2,000 purchased for the investment of a donation for the maintenance of Sir Dinshaw Petit Statue.	7 8 0	
11	Municipal Commissioner's No. E. G. 304 of 28th November 1918.	Payment of a fee to the Bank of Bombay for keeping the abovementioned War Bonds in the safe custody of the Bank.	2 0 0	
12	Municipal Commissioner's No. B. 113 of 7th November 1918.	Salary of an Assistant Ejector Fitter under the Deputy Executive Engineer, M. B., at Rs. 90 per mensem and War Allowance for six months from September 1918 to February 1919.	393 6 5	
13	Municipal Commissioner's No. E. G. 409 of 26th November 1918.	Cost of flags, purchased from Messrs. Bhawoo Kashinath & Co., for decorating the Municipal Office Buildings on the occasion of celebration of the armistice.	1,230 0 0	
13A	Corporation Resolution No. 5674 of 18th November 1918.	Payment of extra 10 per cent. increase over the contract rates to Messrs. Fakir Mahomed Mehta & Co. in respect of their contract for constructing wooden gate, and barbed wire fence in the Stores yard.	25 1 5	
		Carried forward ...	5,293 12 5	

Serial No.	Sanctioning Authority.	Particulars.	Amount.	Remarks.
			Rs. a. p.	
		Brought over ...	5,293 12 5	
14	Standing Committee Resolution No. 4915 of 23rd October 1918.	Cost of making good the damage done to a down-take pipe of the build ng known as Chinoy Chawl at Fergusson Road owing to the night soil cart colliding with it.	4 8 0	
15	Municipal Commissioner's Order, dated 6th November 1918.	Payment of 4 months' wages of a policeman posted at the Victoria and Albert Museum during the time it was open to the public from 4th December 1918.	46 13 1	
16	Municipal Commissioner's No. D. E. 347 of 23rd January 1919.	Payment of bonus to Muccadum Sambha Mahadu of Drainage Department for persuading the men to return to work during the time of strikes.	20 0 0	
17	Standing Committee Resolution No. 4914 of 23rd October 1918.	Compensation to the Standard Oil Co. for the loss of articles belonging to them owing to the action of the Municipal Fire Brigade on the occasion of a fire in the Prince's Dock.	195 0 0	
18	Municipal Commissioner's No. S. P. 17 of 30th January 1919.	Payment of honoraria to certain clerks in the Municipal Commissioner's Office for extra work in connection with the preparation of new Printing Schedules, &c.	105 0 0	
19	Municipal Commissioner's No. E. G. 5/409 of 22nd February 1919.	Expenses in connection with the decoration of Municipal Offices (including making of 100 staffs by Municipal Workshops) on the occasion of the celebration of the armistice.	826 1 7	
20	Municipal Commissioner's No. E. G. 117 of 20th September 1918.	Construction of a Motor Garage for the Deputy Executive Engineer, M. B., at Worli Hill.	352 0 0	
21	Municipal Commissioner's No. E. G. 12/D. of 12th April 1919.	Adjustment of the Workshops bill for carrying benches from all parts of the City and stocking them at the Oval on the occasion of the armistice festival.	67 5 0	
		Total Rs. ...	6,910 8 1	
		Less— Credit	—522 14 0	*
		Net expenditure ...	6,387 10 1	

* Amount temporarily debited to this grant, pending adjustment against the proper grant under "extra and overtime," labour, workshops, which was supplemented by an advance from Surplus Cash Balance with the sanction of the Standing Committee and the Corporation ... ... Rs. 502 14 0

Amount refunded by Muccadum Sambha Mahadu as he has not accepted the bonus offered to him for inducing the men to join duty during the strikes ... ... „ 20 0 0

Rs. 522 14 0

H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

BOMBAY, 19*th September* 1919.

Statement of Stores Transactions for the year ending 31st March 1919.

(Appendix O of the Stores and Stores Audit Manual.)

General Stores Department.	Figures as per books of the Chief Accountant.					Figures as per Balance Sheet of the Storekeeper.				
	Balance on 31st March 1918.	Receipts during 1918-19.	Total.	Issues during 1918-19.	Balance on 31st March 1919.	Balance on 31st March 1918.	Receipts during 1918-19.	Total.	Issues during 1918-19.	Balance on 31st March 1919.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
General Stores ...	5,37,969 10 11	9,79,603 15 2	15,67,573 10 1	9,91,667 3 6	5,75,906 6 7	5,43,538 9 3	9,97,383 7 1	15,40,872 0 4	10,05,167 1 11	5,35,704 14 5
Surplus and Obsolete Stores	3,085 4 0	4 4 4	3,089 8 4	517 9 6	2,571 14 10	3,089 8 4	.....	3,089 8 4	517 9 6	2,571 14 10
Line Suspense Account	1,01,396 12 4	879 0 0	1,02,275 12 4	214 1 0	1,02,061 11 4	1,01,396 12 4	879 0 0	1,02,275 12 4	214 1 0	1,02,061 11 4
Total Rs. ...	6,92,451 11 3	9,80,487 3 6	16,72,938 14 9	9,92,398 14 0	6,80,540 0 9	6,48,024 13 11	9,98,212 7 1	16,46,237 5 0	10,05,898 12 5	6,40,338 8 7
									Difference ...	40,201 8 2
										6,80,540 0 9

The difference of Rs. 40,201-8-2 between the balances on 31st March 1919, as shown above, is mainly due to non-adjustment in the books of the Chief Accountant of the value of stores issued to different Departments, which will be adjusted in the next year's accounts.

H. S. KATRAK,
BHUKHANDAS B. DESAI,
Municipal Auditors.

BOMBAY, 19*th September* 1919.

PART II.

CONTENTS.

	Page
CONDITIONS OF PUBLIC HEALTH	1
Introductory Remarks	1
Review of the Health Conditions in 1918	1
Estimate of population in 1918	3
Births and Deaths registered from Principal Causes (1901-1918)	5
Principal Statistics for 1918	5
Rainfall in 1918	6
Readings of the Thermometer	6
Births and Birth-rate	7
Births by Months	7
Calculation of the Birth-rate	7
Corrected number of Births and Birth-rate	8
Prosecution for Omission to report Births	8
Birth-rate by Races...	8
,, ,, Sections	9
Mortality and Death-rate	9
Correction in the number of Deaths and Death-rate	10
Mortality by Sex and Age-group	10
Infant Mortality	11
Percentage of Infant Mortality	11
Infantile Deaths by Months	12
,, ,, from Principal Causes	12
,, ,, by Age-periods...	12
,, ,, ,, Caste	14
,, ,, ,, Sections	15
,, ,, ,, the number of rooms occupied	16
Measures to control Infant Mortality	16
The Bombay Sanitary Association and the Lady Willingdon Scheme... ...	16
Work of the Municipal Nurses and Lady Health Visitors	19
Relief to Poor Women during Confinement	20
Municipal Maternity Homes	20
Table showing daily Mortality in 1918	21
Mortality in Hospitals (1917-1918)	21
Mortality from Principal Causes of Death (1917-1918)	22
,, ,, Zymotic Diseases (1917-1918)	22
,, by Races	23
Comparative incidence of Principal Diseases in different Communities ...	24

	Page
Mortality by Months	24
„ „ Sections	25
„ „ Place of Birth	26
PLAGUE	26
Attacks and Deaths from Plague (1896-1918) and Total Mortality (1891-1918).	27
Plague by Months	27
Plague by Races	28
„ „ Sex and Age	28
„ „ Sections (1917-1918)	28
PLAGUE MEASURES	29
Inoculation	30
Rat Destruction	30
Relation between Rat Plague and Human Plague	30
Evacuation	30
Disinfection	31
Quantities and Cost of Disinfectants used	31
SMALL-POX	31
Small-pox Attacks and Deaths by Months	32
Importation of Small-pox	32
Small-pox by Sections	32
„ „ Sex and Age	33
Vaccinal condition of Infants who died of Small-pox	33
„ „ „ Children who died of Small-pox at the Arthur Road Hospital	33
VACCINATION STATEMENT FOR 1918	34
Vaccination Stations	35
Vaccine tubes tested	35
Measures for control	35
Vaccination of Pilgrims to the Haj	35
Small-pox among Goans and compulsory vaccination	35
CHOLERA	36
Cholera by Months	36
Measures for control	37
Cholera by Races	37
„ „ Sex and Age	37
„ „ Sections	38
INFLUENZA	39
Deaths from Influenza	39
Measures for control	39
Temporary Dispensaries and Hospitals	40
TUBERCULOSIS	40
Tuberculosis by Sections	41
„ „ Race or Caste	42
Provision of beds for Tuberculosis by the Municipality	43
WORK DONE BY THE ANTI-TUBERCULOSIS LEAGUE	43
Investigations into the prevalence of Tuberculosis	43
The Educational Propaganda	43
Work of the Tuberculosis Dispensaries	43
Sanitarium for Tuberculosis	43
FEVER	43
Fever Mortality by Months	44

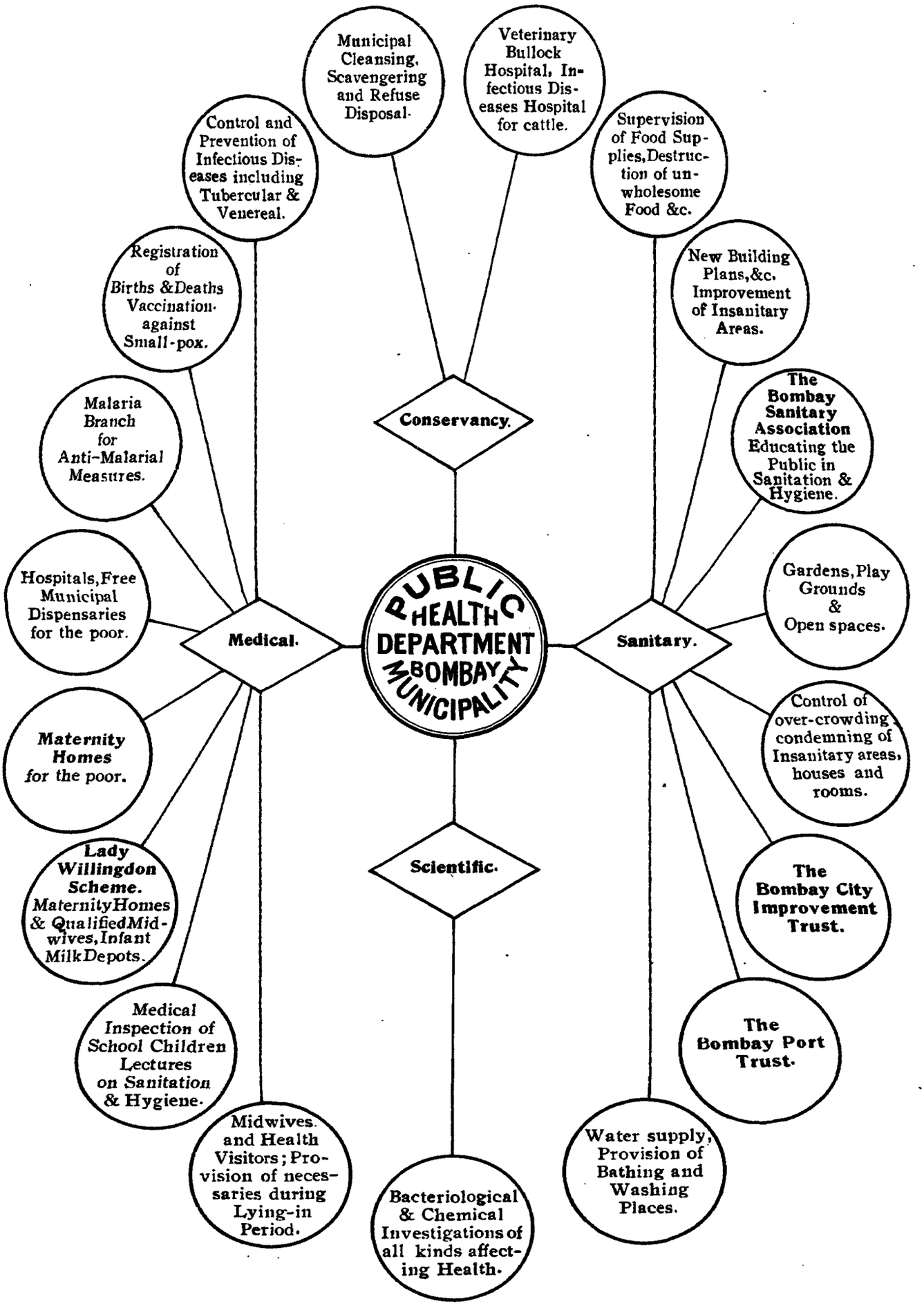
	Page
Malaria	44
Spleen Examination	45
Distribution of Quinine	48
Number of wells covered	49
Mortality from other Causes of Death	53
Free Municipal Dispensaries	54
Notification of Infectious Diseases	55
Certification of the Cause of Death	55
Issue of Certificates of Registry	55
Notices and Summonses issued under the Act	55
Conservancy Work	56
ADMINISTRATION OF PUBLIC HEALTH	56
Division of the City and the Executive Staff	56
Prosecution for infringing license conditions and selling adulterated milk	56
Destruction of Stray and Ownerless Dogs	56
Improvement of Insanitary Areas and U. H. H. Buildings and Rooms	57
Unwholesome Food seized and destroyed	57
General Sanitation and Conservancy of the City	58
Storm-water Reservoir and the Storm-water drain	61
Improvement of Insanitary Areas	64
Cost of the Department	70
Work of the Department—Appreciation	70
Report of the Assistant Health Officer in charge, Arthur Road Hospital.	73
Report of the Assistant Health Officer in charge, Maratha Plague Hospital	85
Report of the Municipal Analyst	91
Statement of Well and Tank waters examined	96
„ showing the number of Articles examined bacteriologically	97
„ showing the number of Articles examined chemically	98
Report of the Superintendent of Vaccination	99
TABLES—	
Meteorological Data	103
Population, Births and Birth-rates by Sex and Section	104
Area and Deaths and Death-rates from Principal Causes by Sections.	105
Deaths by Months and Sections	106
„ „ Sections and Age-periods	107
Population, Deaths and Death-rates by Classes and Sections	108
Deaths and Death-rates from Cholera by Sections and Months	110
„ „ „ Small-pox „ „	111
„ „ „ Measles „ „	112
„ „ „ Plague „ „	113
„ „ „ Malaria „ „	114
„ „ „ Enteric Fever „ „	115
„ „ „ Other Fevers „ „	116
„ „ „ Diarrhœa and Dysentery by sections and months	117
„ „ „ Tuberculosis „ „ „ „	118
„ „ „ Respiratory Diseases „ „ „ „	119
„ „ „ Injuries „ „ „ „	120
„ „ „ Other Causes „ „ „ „	121
„ „ „ Principal Causes in 1918 and in preceding 5 years	122
Specific Causes	123
Vaccine Operations performed	130

	Page
Births registered and Infants Vaccinated	131
Other Vaccination Returns	131
Deaths by Causes and Sections	132
„ „ Race, Cause and Sex	134
„ „ Age „ „	138
„ „ Cause and Occupation	142
„ „ Race, Age and Sex	146
Death-rates by Cause and Race	148
Births in different months by Caste and Sex	149
Still-births by Race, Sex and Month	150
„ „ „ Section and Month	151
Deaths in different Hospitals and Asylums	152
Plague Deaths by Streets and Races	153
Deaths in different Circles from Principal Causes	162

DIAGRAMS—

	Facing Page
Scheme of General Sanitary Administration, Bombay...	1
Daily Mean Births, Deaths and Climatic Conditions, 1918	6
Death-rate in Bombay, 1872-1918	10
Percentage of Population, Births and Infant Mortality in each class of tenements, (1917-1918)	16
Percentages of Deaths from Principal Causes, 1918	22
Monthly total Mortality and deaths from principal causes	24
Relation of Rat-Plague to Human-Plague, 1908-1918	30

SCHEME OF GENERAL SANITARY ADMINISTRATION BOMBAY.


PUBLIC HEALTH DEPARTMENT BOMBAY MUNICIPALITY
Conservancy.
Medical.
Sanitary.
Scientific.
Municipal Cleansing, Scavengering and Refuse Disposal.
Veterinary Bullock Hospital, Infectious Diseases Hospital for cattle.
Control and Prevention of Infectious Diseases including Tubercular & Venereal.
Supervision of Food Supplies, Destruction of unwholesome Food &c.
Registration of Births & Deaths Vaccination against Small-pox.
New Building Plans, &c. Improvement of Insanitary Areas.
Malaria Branch for Anti-Malarial Measures.
The Bombay Sanitary Association Educating the Public in Sanitation & Hygiene.
Hospitals, Free Municipal Dispensaries for the poor.
Gardens, Play Grounds & Open spaces.
Maternity Homes for the poor.
Control of over-crowding, condemning of Insanitary areas, houses and rooms.
Lady Willingdon Scheme. Maternity Homes & Qualified Mid-wives, Infant Milk Depots.
The Bombay City Improvement Trust.
Medical Inspection of School Children Lectures on Sanitation & Hygiene.
The Bombay Port Trust.
Midwives and Health Visitors; Provision of necessaries during Lying-in Period.
Water supply, Provision of Bathing and Washing Places.
Bacteriological & Chemical Investigations of all kinds affecting Health.

SHRI KARUNESH P. PRESS, BOMBAY No 4

PUBLIC HEALTH.

Annual Report of the Executive Health Officer for 1918.

I have the honour to present my nineteenth Annual Report on the conditions and administration of the Public Health of Bombay during 1918.

General review of the year.

The outstanding feature of the year was a series of epidemics which followed one another in quick succession, lasting altogether for over thirty-nine weeks, and were responsible for an appalling increase in mortality.

(1) Cholera was epidemic in the first and last months of the year: in the week ending 12th January and again from the week ending 14th December (to that ending 1st March 1919); the mortality from this cause during the year was 1,662 against 61 in 1917.

(2) Small-pox was epidemic from the week ending 9th February to that ending 11th May; the mortality from it during the year being 1,024, against 269 in 1917.

(3) Plague was epidemic from the week ending 30th March to that ending 25th May and caused 1,143 deaths during the year, that is, 563 less than in 1917.

(4) Influenza was epidemic from the week ending 22nd June to that ending 13th July; and again from the week ending 21st September to that ending 9th November; 3,964 deaths were ascribed to it during the year against 5 in 1917.

The total number of deaths from these diseases registered during the year was 7,793, that is an increase of 5,752 over the corresponding figure for 1917.

The total number of deaths from all causes during the year was 58,388 marking an increase of 24,998 over that in 1917. The death-rate was 59·61 per mille against 34·09 in 1917. This figure of 58,388 is inclusive of 3,274 deaths among new arrivals not belonging to the City. The steady and growing increase in the number of deaths recorded among such persons will be seen from the following figures:—

Year.	No. of deaths among new arrivals (not belonging to the City).
1915	601
1916	1,642
1917	1,752
1918	3,274 (the highest on record).

The infant mortality in 1918 was 12,829, giving an increase of 3,959 over the figure for 1917. The ratio per thousand of births registered was 590·30 against 409·6 in 1917. The mortality registered from Respiratory Diseases was more than double that in 1917; that is, 23,487 against 11,231. This increase is due mostly to deaths from Influenzal Pneumonia having been returned as Pneumonia and classed under the Respiratory Diseases.

The mortality from Tuberculosis was 2,513; that is 395 more than in 1917.

The number of live births registered was 21,733 against 21,651 in 1917; the birth-rate per thousand of population being 22·18 against 22·10 in 1917.

It may be noted that the ratios for 1918 have been calculated on the basis of the population enumerated at the Census of 1911 (9,79,445); since then the City's population has vastly increased; besides the natural increase, we have to take into account the increase due to adventitious causes, which may be roughly put down at 2 to 3 lakhs.

In my fifteenth Annual Report (for 1914) I reviewed the history of public health conditions since 1900 and pointed out how, during all those years, while population had increased, epidemics had become less frequent and been marked by a decreasing fatality; and in consequence of an enormous reduction in mortality, the health conditions reflected a steady and encouraging improvement, until they bade fare to approximate more and more to the conditions of Western cities. I added that there was still room for further improvement and that there was a marked tendency in that direction which should encourage those in charge of the sanitary administration of the City to insistently press on the attention of the authorities the supreme urgency of those sanitary measures and reforms which more immediately affected the physical condition of the people and their surroundings and were the basis of all lasting improvements in public health.

I however emphasised that enormous and encouraging as the improvement in the public health of the City had already been, it was not so great as it could or should have been; but was nevertheless sufficient to establish the value and efficiency of the sanitary measures that had in more recent years been pursued and stimulate the authorities to persevere in their efforts with greater courage and confidence and a wider outlook, because of a more assured sense of the possibilities of further improvement which, all things being favourable, should be more rapid than in the past.

The conditions of public health showed further improvement during the following year: and 1915 proved in many respects a year of records and, on the whole, the healthiest year in the annals of the City. Since 1916 however the effects of the abnormal conditions induced by the continuance of the War began to make themselves felt to an increasing degree; the enormous increase in the floating and semi-permanent population of the City and the resultant over-crowding with the evils that follow in its train operated to the increasing prejudice of public health, as will be seen from the following figures:—

	1914.	1915.	1916.	1917.
Birth-rate per 1,000 of population	20·09	20·47	21·62	22·10
Total death-rate " "	32·52	24·17	31·21	34·09
Infant mortality per 1,000 of Births registered... ...	385·1	329·2	378·8	409·6
Death-rate from Tuberculosis per 1,000 of population ...	1·92	1·74	1·94	2·16
Death-rate from Respiratory Diseases per 1,000 of population.	8·91	6·91	9·85	11·46
Death-rate from Plague per 1,000 of population ...	3·00	·61	2·02	1·74
Death-rate from Small-pox per 1,000 of population ...	·25	·36	1·04	·27
Death-rate from Cholera " "	·22	·01	·14	·06
Death-rate from Fever including Malaria per 1,000 of population.	2·93	2·13	2·18	2·50
Death-rate from Malaria per 1,000 of population ...	·21	·21	·24	·26

In my Annual Report for the year I noted as follows:—"Apart from this, over 1,50,000 sick and wounded passed through the War Hospitals in Bombay and over 4,000 cases of Infectious Diseases from the Overseas were notified to the Health Department by the Military Authorities during the year. It may also be added that 384 cases of Jigger amongst Indian troops were received in the Municipal Hospitals, and about 3,000 cases of Malaria were notified amongst the arrivals from the Overseas."

In the note I submitted to the Municipal Commissioner in December 1916, I observed also as follows:—

"We are now however confronted with a most serious problem. I am informed by the General Officer Commanding Troops, Bombay, that he is dealing with an organisation of supplying 50,000 coolies to Mesopotamia and that it will be necessary to accommodate them in Bombay during the process of transport and that Camps have been erected at Dadar for this purpose and a hospital for 2,000 beds is also under construction for the treatment of the sick while here and those invalided from Mesopotamia and East Africa with a sickness-rate of 100 per cent. Owing to the War and the operations going on in Africa and Mesopotamia, two notoriously unhealthy areas, we must expect and be prepared to cope with the introduction of diseases which hitherto we have been fairly free from and to do all in our power to assist the Military Authorities in their arduous duties and to maintain the City in as healthy a condition as possible under the circumstances.

"Bombay is not the only city in the World where sick and wounded are returning in large numbers, and in the exigencies of War we must undertake duties that War may bring, but the climatic conditions and circumstances of life and surroundings of the City and the people do not lend themselves so readily to sanitary control as they do in other cities in the West."

The impairment of public health during succeeding years may largely be put down to the conditions and circumstances of the War. It is true that India has in a sense been practically untouched by the ravages and horrors of actual War which devastated the theatres in which it was waged and laid waste the cities and villages through which its progress lay; but the horrors and evils which it brings in its train have none the less been severely visited on India—and on Bombay in an especial degree owing to its position of natural advantage as the sea-port for embarkation and disembarkation and the administrative capital of the Presidency.

Actual War, terrible as it is, it may be said, is more merciful than the ravages of disease. In War it is the strong men who take the risks and pay the cost, but disease strikes hardest at the weak, the poor and the old, at women and children.

In Bombay, while overcrowding increased apace, large sanitary works and improvement schemes were held up owing to the financial stringency induced by the War. Public bodies and sanitary authorities could not raise loans necessary to meet the capital expenditure on large works nor could they, owing to the difficulty of importing plant and material and the abnormal rise in prices, substitute modern sanitary methods of improvement in sanitary and conservancy arrangements of the City to the extent and at the pace required, nor could they call upon house owners to carry out the necessary improvements except in most urgent cases. Thus the proposals regarding drainage, quick transport of refuse, incineration, sanitary disposal of carcasses, housing of the labour staff, demolition of houses and rooms and the conversion of basket privies into water closets except in the very worst cases, the improvement of insanitary areas and more stringent Building bye-laws, had all to be deferred to a more convenient time to be ushered in by the close of the War and the return of normal conditions. Meanwhile the insanitary conditions went on intensifying to the great detriment of Public Health until the inevitable retribution followed in a series of epidemics which characterized the year under report.

In my report for 1917, I remarked that the health conditions during the year had, all things considered, been very satisfactory—somewhat more so than in 1913, the year immediately preceding the War; that the vital statistics had however been largely disturbed by an enormous influx of people into Bombay, to which not only the attraction of high wages and employment but the presence of various infectious and other diseases in mofussil towns and villages had drawn many thousands, with the result that the overcrowding in the City with its lessening poor class accommodation and its numerous insanitary areas had been fearfully intensified. "To compete with the circumstances surrounding a progressive and rapidly expanding City like Bombay is difficult in normal times. . . Considering all the circumstances, Bombay has suffered less than might have been expected . . . but we are now beginning to feel the result of the increase in the overcrowded condition of the City". To these causes were added during 1918, increasing dearness of food, drought, famine and pestilence which follows in the wake of famine. Thousands of refugees from famine-stricken areas in a weakened and destitute condition, thousands attracted by commercial prosperity and the demand for labour, pressed on the already strained resources of the City and the results were appalling to an extent unknown to history. The Census of 1911 revealed the grim fact that 79 per cent. of the City's population lived in one room tenements; what the next Census will reveal is fearful to contemplate unless great and rapid strides are made to remedy the grave existing defects. In spite of the ravages of epidemic diseases, notably Influenza and Cholera, the former of which is stated to have caused nearly six million deaths in the whole of India, Bombay would appear to have been so over-crowded, from known facts and the available evidence such as the increase in the birth-rate, in the unprecedentedly large number of deaths recorded among new arrivals not belonging to Bombay, and in the number of passengers conveyed by the Tramway, the insistent demand for more accommodation and the concomitant abnormal rise in rents which had ultimately to be checked by legislation, that it was not difficult to foresee that untold sufferings were in store for the City.

At the beginning of the year, I observed in my first quarterly report that the population estimated in the third quarter of 1917 at 11,00,000 had much increased. Towards the end of the year—in December.—I noted that we had about "four lakhs of people more than we have house accommodation, water or drainage disposal for. More are daily coming in from famine-

stricken districts unhealthy, weak and suffering. Their habits are primitive ; they live where they can; unused to the City life, they do not know how to procure the necessaries of existence which are dear. Cholera is prevalent in the surrounding districts and famine diseases will also follow". I said, in one of my reports to the Municipal Commissioner, "we are suffering from the effects of one of the worst monsoons on record. The City is over-populated to the extent of two to three lakhs of people. The water supply is deficient, the drainage arrangements defective, and the housing accommodation appalling in its defects. We are suffering from these conditions and are likely to suffer. I have pointed this out to the Corporation ; and in letters to the Municipal Commissioner and the Corporation, I have said that pestilence will follow unless certain steps are taken".

The general overcrowding and the uncleanness and other evils of the slums have always been vigorously attacked ; no difference of opinion is ever expressed as to the necessity and urgency of operations for cleansing the life of the community and replenishing the springs of its vitality and strength. The law has recently been amended and some U. H. H. rooms and tenements have been condemned but the progress is necessarily slow and hampered by the fear of hastily demolishing any of the inadequate accommodation that exists without suitably replacing it.

It is the duty of the sanitary authority not so much to constitute itself an exponent of mere caution, criticism and thrift especially in matters of sanitary improvement bearing closely upon the health of the community, as to view and handle the sanitary problems of the City in a spirit of whole-hearted humanity as well as of far-sighted wisdom, so that it may successfully grapple with the distress and menace of insanitary conditions. It is rather unfortunate that outlay on schemes connected with public health brings in no speedy visible return so as to strike the imagination, but yields its results slowly and only in the prosaic symbol of a lowered death-rate ; but the crusade against disease and the conditions that produce it has to be continuous and cannot be carried on without proper and adequate equipment to meet the new conditions that arise from time to time in a large and progressive City.

Much of modern progress is due largely to the division of labour and co-operation of different Departments but we must beware of expecting too much from any one Department. Yet the Health Department is blamed for every thing and even for the delays and defects of other Departments: for the Influenza epidemic and the Cholera epidemic, the famine and influx of people, the deficient water supply, the choked drains and defective conservancy, obstructed foot-paths, overcrowded rooms, over-flooded compounds, leaking roofs—none of which it has the power to control. I have appealed from time to time to the Municipal Commissioner and other Departments pleading for a closer co-operation and a quicker and wider appreciation of the issues involved and have repeatedly pointed out the delays and defects of the existing system.

Of all the problems with which the City is faced, the acutest is that of rapid increase in the demand for working-class accommodation. This is an industrial as well as a sanitary problem, and it is the urgent duty of the large employers of labour, such as the Railways, the Municipal Corporation, the Port and City Improvement Trusts, no less than millowners and other captains of industry in the City to provide free or at cheap rents suitable residential quarters for the labour employed by them. Although during the last two years there has been a considerable increase in the housing accommodation for the upper, middle and higher classes of the community, the supply for the lower classes has continued hopelessly inadequate. In the words of a former President of the Local Government Board, England, (Mr. John Burns), " what was spent on housing was almost saved in hospitals. What they (who provided the accommodation) gave by good homes for the people which were something more than mere shelters was returned to them in less lunacy, less drunkenness, more sober men and more womanly women. (We may add—in a lower sickness rate, a lower death-rate and the greater efficiency of labour). And it was important to observe that there was no charity about housing projects. Charity in housing was very much like the charity that covered a multitude of industrial sins. Charity in rent meant a premium on low wages."

It may be mentioned that in Bombay City, Government are taking steps to have, as a beginning, five hundred rooms erected by the City Improvemet Trust for accommodating immigrant labourers—with the object of relieving overcrowding due to famine refugees and general increase in the population. Now that the War is happily over, it is to be hoped that large works and sanitary improvements recommended and urged in the past will be pushed on with vigour and that the steady improvement of public health which was arrested and so grievously retarded during the last two or three years by a variety of circumstances as detailed above will now continue unimpeded.

Table of Births and Deaths registered from Principal Causes during 1901-1918.

Year.	Births (excluding still-born).		Deaths from all causes (excluding still-born).		Plague.		Small-pox.		Cholera.		Malaria.		All Fevers (including Malaria.)		Measles.		Diarrhœa & Dysentery.		Tuberculosis.		Nervous Diseases.		Respiratory Diseases.		Infant Mortality.			Mortality of Children (1 to 5 years).		Still-born.
	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000.	No. registered.	Rate per 1,000 of Births registered.		No. registered.	Per cent to total mortality.	
1901	13,520	17·42	59,495	76·66	18,736	24·14	159	·20	198	·25	..	..	7,921	10·20	67	·08	3,716	4·7	7,089	9·13	2,971	3·8	7,804	10·05	7,768	574·5		4,200	7·05	2,153
1902	17,599	22·67	48,414	62·38	13,820	17·80	288	·37	75	·09	..	..	4,518	5·82	642	·82	3,641	4·6	4,595	5·92	3,027	3·9	7,250	9·34	9,553	542·8		3,890	8·03	2,017
1903	16,375	21·10	50,513	65·09	20,788	26·78	1,477	1·90	17	·02	294	·37	2,500	3·22	1,115	1·43	2,760	3 5	3,475	4·47	2,282	2·9	7,101	9·15	8,718	532·3		4,087	8·09	2,818
1904	19,556	25·20	42,676	54·99	13,538	17·44	568	·73	219	·28	270	·34	2,530	3·26	229	·29	2,784	3·5	3,548	4·57	2,412	3·1	7,339	9·45	8,981	459·2		3,274	7·66	2,033
1905	19,141	24·66	47,762	61·54	14,198	18·29	2,161	2·78	26	·03	267	·34	2,878	3·70	620	·79	3,390	4·3	3,183	4·10	2,026	2·6	9,103	11·78	10,664	557·1		4,550	9·52	2,073
1906	20,769	21·24	52,874	54·07	10,823	11·06	276	·28	1,241	1·26	190	·19	4,882	4·99	936	·95	4,778	4·8	4,052	4·14	2,085	2·1	11,731	11·99	11,106	534·7		5,314	10·05	2,193
1907	19,535	19·97	38,687	39·56	6,389	6·53	86	·08	439	·44	149	·15	3,633	3·71	107	·10	3,489	3·5	3,440	3·51	1,863	1·9	9,022	9·22	8,276	423·6		3,670	9·48	1,830
1908	20,166	20·62	38,271	39·13	5,361	5·48	1,026	1·04	95	·09	331	·33	3,403	3·48	653	·66	3,184	3·2	3,023	3·09	2,083	2·1	8,954	9·15	9,077	450·1		4,173	10·90	1,918
1909	19,839	20·28	34,878	35·66	5,197	5·31	473	·48	727	·74	293	·29	2,800	2·86	75	·07	2,585	2·6	2,862	2·92	2,143	2·1	7,974	8·15	8,030	404·7		2,972	8·52	1,806
1910	19,939	20·39	34,933	35·72	3,656	3·73	1,008	1·03	107	·10	293	·29	3,113	3·18	184	·18	3,352	3·4	2,839	2·90	2,003	2·0	8,212	8·39	8,253	413·9		4,001	11·45	1,568
1911	21,376	21·82	34,961	35·69	4,006	4·09	443	·45	123	·12	334	·34	3,146	3·21	652	·66	3,075	3·1	2,694	2·75	2,006	2·0	8,640	8·82	8,120	379·8		4,227	12·09	1,759
1912	21,518	21·96	38,954	39·77	1,717	1·75	979	·99	1,790	1·82	360	·36	3,585	3·66	210	·21	4,544	4·6	2,794	2·85	2,236	2·2	9,686	9·88	9,646	448·2		4,830	12·39	1,668
1913	19,644	20·05	31,806	32·47	2,609	2·66	212	·21	125	·12	261	·26	3,043	3·10	222	·22	3,173	3·2	2,152	2·19	1,965	2·0	8,604	8·78	7,488	381·1		3,661	11·51	1,592
1914	19,679	20·09	31,853	32·52	2,941	3·00	252	·25	221	·22	213	·21	2,877	2·93	263	·26	3,102	3·1	1,889	1·92	1,935	1 9	8,734	8·91	7,580	385·1		3,775	11·85	1,561
1915	20,052	20·47	23,681	24·17	599	·61	359	·36	16	·01	202	·21	2,091	2·13	70	·07	2,195	2·2	1,710	1·74	1,536	1 5	6,770	6·91	6,602	329·2		2,535	10·70	1,532
1916	21,180	21·62	30,574	31·21	1,987	2·02	1,021	1·04	141	·14	238	·24	2,141	2·18	344	·35	2,420	2·4	1,902	1·94	1,955	1·9	9,649	9·85	8,215	387·8		3,602	11·78	1,687
1917	21,651	22·10	33,390	34·09	1,706	1·74	269	·27	61	·06	262	·26	2,449	2·50	221	·22	2,591	2·64	2,118	2·16	2,063	2·10	11,231	11·46	8,870	409·6		3,939	11·79	1,888
Average of 1908-1917	20,504	18·72	33,330	34·02	2,977	3·03	604	·61	340	·34	278	·28	2,864	2·92	289	·29	3,021	3·08	2,398	2·44	1,992	2·03	8,845	9·03	8,188	446·35		3,771	11·30	1,697
Average of 1913-1917	20,241	20·66	30,261	30·89	1,968	2·00	423	·43	113	·11	236	·24	2,520	2·57	224	·22	2,696	2·75	1,954	1·99	1,891	1·93	8,998	9·18	7,751	382·93		3,502	11·57	1,652
1918	21,733	22·18	58,388	59·61	1,143	1·16	1,024	1·04	1,662	1·69	200	·23	4,553	4·64	486	·49	2,797	2·62	2,513	2·56	2,749	2·80	23,487	23·97	12,829	590·3		7,479	12·80	2,065

The principal statistics for the year are as follows :—

Area of Bombay City and Island	22·55 sq. miles.
Population—by the Census of 1911..	979,445
Average density of population over the whole Island ..	67 per acre.
Total rainfall	35·54
Number of live births registered	21,733
Number of deaths from all causes	58,388
Number of deaths of infants (under 1 year)	12,829
Number of deaths of children, 1 to 5 years	7,479
Number of deaths from Plague	1,143
Number of deaths from Small-pox	1,024
Number of deaths from Cholera	1,662
Number of deaths from Malaria	200
Number of deaths from all Fevers including Malaria ..	4,553
Number of deaths from Influenza	3,964
Number of deaths from Measles	486
Number of deaths from Tuberculosis	2,513
Number of deaths from Respiratory Diseases	23,487

Principal Statistics for 1918.

Birth-rate per 1,000 of population..	22·18
Death-rate per 1,000 of population..	59·61
Infantile death-rate per 1,000 births registered	590·30
Death-rate of children, 1 to 5 years, per 1,000 of child population	12·80
Death-rate from Plague	1·16
Death-rate from Small-pox	1·04
Death-rate from Cholera	1·69
Death-rate from Malaria	·23
Death-rate from all Fevers	4·64
Death rate from Influenza	4·04
Death-rate from Measles	·49
Death-rate from Tuberculosis	2·56
Death-rate from Respiratory Diseases	23·97

The following table shows the monthly and total rainfall in the City during the last eleven years:—

Years	January to June.	July.	August.	September to December.	Total.
1908	15·41	21·13	9·67	7·33	53·54
1909	16·68	31·37	7·82	15·35	71·22
1910	23·95	7·42	16·89	19·60	67·86
1911	10·95	15·89	16·90	2·77	46·51
1912	11·22	25·77	9·70	7·36	54·05
1913	25·81	33·58	3·47	8·10	70·96
1914	16·84	31·12	12·44	21·22	81·62
1915	41·51	14·39	8·93	12·85	77·68
1916	23·66	25·10	17·19	20·10	83·05
1917	17·89	12·91	33·27	35·69	99·76
1918	**23·28**	**4·31**	**4·80**	**3·15**	**35·54**

During the period under review rain fell on 94 days against 134 days in 1917 and 128 in 1916.

The rainfall was distributed monthly as follows:— 1·46 inches on two days in March, 11·17 inches on 13 days in May, 10·65 inches on 19 days in June, 4·31 inches on 21 days in July, 4·80 inches on 25 days in August, 3·06 inches on 13 days in September and 0·09 cents on one day in November.

The maximum monthly rainfall was 11·17 inches in May against 33·27 in August 1917 and 25·10 inches in July 1916.

The rainfall during the year was one of the scantiest in the history of the City : it was about half the normal (71·15) ; it was the lowest since 1905 (33·66).

Readings of the Thermometer.

MONTHS.	1913.			1914.			1915.			1916.			1917.			1918.		
	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.
January ..	84·5	75·7	65·4	87·2	68·7	77·0	84·7	75·4	64·4	87·8	77·6	66·3	86·4	76·7	67·0	85·1	75·5	63·7
February .	84·6	76·5	64·8	84·5	63·4	76·0	82·2	74·9	64·4	83·3	74·3	61·4	88·1	77·2	66·2	85·0	76·2	62·0
March ..	86·0	77·6	69·3	86·3	69·2	78·0	90·2	79·8	71·0	89·2	81·3	71·2	89·5	79·7	70·2	88·3	81·0	67·3
April ..	89·3	82·7	72·5	89·5	74·4	81·9	90·2	83·9	76·2	91·1	83·7	76·6	89·1	82·9	76·6	88·2	81·7	72·5
May ..	92·4	86·5	79·4	91·3	80·3	86·5	92·5	87·0	81·4	92·2	85·9	78·3	90·3	84·6	77·7	90·1	84·2	77·1
June ..	93·0	83·7	74·8	91·6	77·4	85·0	92·6	85·0	77·6	89·3	83·4	77·1	90·9	82·7	77·6	87·6	83·1	76·6
July ..	86·6	81·5	74·8	88·7	76·2	82·2	88·2	82·8	76·1	87·4	81·7	76·2	86·9	82·6	76·4	87·0	83·0	77·9
August ..	85·6	81·4	75·7	85·4	76·8	81·2	85·8	81·6	75·7	86·1	81·3	76·6	86·6	80·4	75·7	85·6	81·7	77·6
September ..	87·1	81·2	76·0	86·6	76·8	81·5	86·3	81·5	76·6	86·9	80·9	76·4	83·7	80·2	74·7	86·0	81·6	76·5
October ..	89·4	82·7	75·0	92·2	76·5	84·4	89·1	81·9	75·2	88·0	81·6	75·4	88·2	80·4	71·6	92·4	83·2	75·9
November ..	89·2	79·8	70·5	91·7	73·4	82·7	89·2	81·7	73·2	87·2	81·1	74·3	87·2	78·6	70·3	91·2	82·2	72·8
December ..	87·0	76·6	64·7	88·4	66·7	77·4	87·4	76·9	68·3	86·3	77·1	66·7	85·2	75·5	65·2	87·0	76·3	66·0

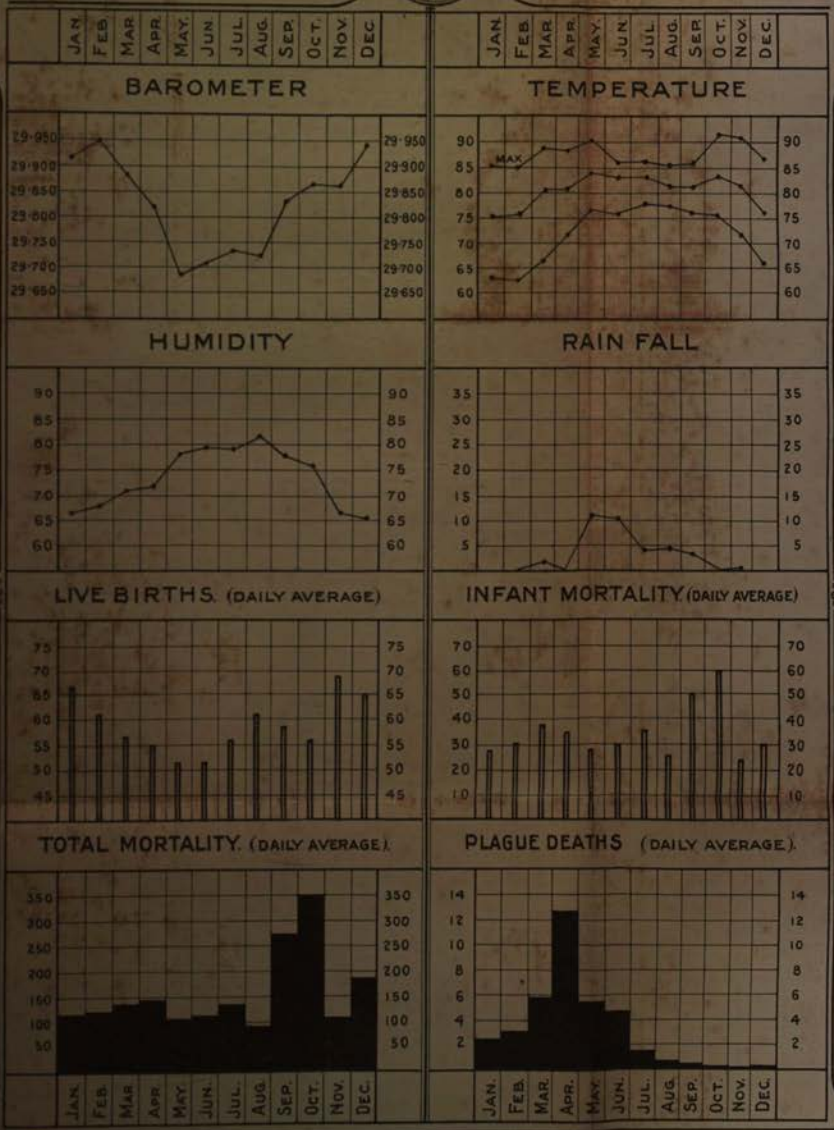
Comparison with decennial average (1908-1917):—

Compared with the averages of the decennium 1908-1917, the number of *live* births registered during 1918 show an increase of 1,229 ; the number of deaths from Plague a reduction of 1,834, deaths from Malaria of 78, and from Diarrhœal Diseases of 224 ; but increases were registered under other heads as shown below :—

Cause of Death.	Increase in mortality in 1918.
Small-pox	420
Cholera	1,322
Measles	197
Fevers (including Malaria)	1,689
Tuberculosis	115
Respiratory Diseases	14,642
Influenza	3,961

DIAGRAM

DAILY MEAN BIRTHS, DEATHS AND CLIMATIC CONDITIONS IN BOMBAY IN 1918



The Infant mortality shows an increase of 4,641 and the mortality from all causes of 26,058.

MONTHS.	No. of births registered in 1918.	No. of births registered in 1917.	No. of births registered in 1916.
January	2,094	1,941	1,921
February	1,710	1,574	1,571
March	1,795	1,643	1,496
April	1,678	1,476	1,396
May	1,627	1,573	1,515
June	1,571	1,555	1,478
July	1,775	1,781	1,710
August	1,904	1,877	1,763
September	1,742	1,879	1,891
October	1,748	2,100	2,195
November	2,044	2,173	2,178
December	2,045	2,079	2,066
TOTAL	21,733	21,651	21,180

Births.

The number of births registered during the year was 21,733 exclusive of 2,066 still-births; it was 82 more than in 1917, and the highest since 1906 (20,760).

The birth-rate per 1,000 of population therefore works out to 22·18 against 22·10 in 1917 and was the highest since 1905 (24·66).

Births by months.

It will be seen from the foregoing table that compared with 1917, the number of births registered during each of the first six months of the year under review and in the month of August was more than in the corresponding months of 1917; the difference (+ 153) was the largest in the first month in which 2,094 births were recorded; then the number suddenly dropped to 1,710 in February, and rose to 1,795 in March, then steadily declined until the lowest monthly number 1,571 was recorded in June; during the next two months the number improved to 1904; then it fell to 1,742 in September and rose again during the following months until the figure of 2,045 was registered in December.

Births by Sex.

Of the total number of births registered (21,733), 11,411 were males and 10,322 females; the male births were therefore to the female births in the proportion of 1,105 to 1,000; the respective birth-rates per 1,000 of sex population being 17·8 and 30·4 against 17·2 and 31·2 in 1917.

Calculation of the birth-rate.

As pointed out in my previous reports, the birth-rate stated in terms of the total population (crude birth-rate) must vary with the proportion of females of conceptive ages in the population and with the age constitution of the married female population. In the case of a City like Bombay where the abnormal constitution of the population is very marked (the proportion of males to females being 2 : 1 in normal times), the birth-rate calculated on the total population of both sexes and all ages is obviously of little value. To get at a correct rate, the calculation should be based, not on the total number of population but on the number of potential mothers, that is, women of 15-45 years of age. If, therefore, the birth-rate for 1918 is calculated on the number of possible mothers disclosed by the Census of 1911, it comes to 104·22 against 103·83 in 1917, 101·57 in 1916, and 93 93 in 1906, when the number of possible mothers (women aged 15-45 years) was greater than in 1911. The results of calculating the proportion of registered births (1) to the total population of both sexes and all ages and (2) to the female population aged 15-45 years are embodied in the following table :—

CENSUS YEAR.	Proportion per cent. of women aged 15—45 years in the total population of both sexes and all ages.	Proportion per cent. of married women in female population aged 15—45 years.	Of the married women aged 15—45 years, the proportion per cent. of four groups of ages.				Persons married to 1,000 marriageable persons in the population.	Birth-rate calculated.		
			Aged 15—20 years.	Aged 20—25 years.	Aged 25—35 years.	Aged 35—45 years.		On the number of Births registered in	Per 1,000 of total population at all ages.	Per 1,000 of female population aged 15—45 years.
1901	22·05	77·08	18·55	25·60	39·35	16·49	714·34	1901	17·42	79·00
1906	22·61	77·04	17·62	27·69	39·89	14·77	738·45	1906	21·24	93·93
1911	21·28	76·75	18·25	27·30	39·69	14·75	716·75	1918	22·18	104·22

Besides the factors which influence in common the birth rate of every community, there are some peculiar to this City: (1) the fairly well-established custom of sending prospective mothers home to their parents, away from the overcrowded houses of a grossly overcrowded City, so that there is in the City a number of children of mothers belonging to but born outside the City and therefore not registered; (2) the omission of parents or relatives to register births, through ignorance or neglect so that there is a considerable number of children who have escaped registration.

Corrected number of births and birth-rate.

During 1918, 5,210 of such children under one year of age were primarily vaccinated in Bombay; but a large number must have escaped vaccination either by death or postponement. It will be seen from table 22 appended to this report that, 67·04 per cent. of the births registered were vaccinated during the year; it may therefore be assumed that 67·04 per cent. of the unregistered children also were vaccinated; the balance of 32·96 per cent. having escaped vaccination either by death or postponement.

Thus the infant population of the City during the year under report works out as follows:—

Number of births registered	21,733
Number of births unregistered (of children primarily vaccinated in Bombay)	5,210
Number of births unregistered and which escaped vaccination being 32·96 per cent.	2,561
Total number of births ...	29,504

giving the birth-rate of 30·12 per 1,000 of population.

Prosecution for omission to report births.

No prosecution under Section 446 (1) of the City of Bombay Municipal Act was instituted during the year for failure to notify the occurrence of births to this Department.

Births by Races.

The birth-rate registered for the entire population was 22·18 in 1918.

Taking, however, the Hindu communities as a whole, the birth-rate registered by them works out to 21·53 against 21·16 in 1917 and 20·56 in 1916.

Among the different communities inhabiting the City, Lingaits and Hindus, low caste recorded the highest rates during the year; 67·85 being registered by the former and 63·88 by the latter against 61·91 and 56·99 respectively in 1917; the lowest rate (15 55) was recorded by Bhatias against 12·33 by Brahmins in 1917.

Compared with 1917, every community registered an improved birth-rate with the exception of Bhatias (15·55), Hindus of other castes (18·20), Parsees (27·40), Jews (34·86), Indian Christians (25·19) and Eurasians (25·54) who registered a decline.

The birth-rate among Brahmins which was 11·10 in 1916 and 12·33 in 1917 further improved to 22·17 in the year under report; among Lingaits from 47·49 in 1916 to 61·91 in 1917 to 67·85 in 1918; Hindus, low caste from 56·99 to 63·88 in 1918 and Europeans from 16·64 to 17·99.

TABLE OF BIRTH-RATES FOR THE DIFFERENT RACES OF THE CITY FOR 1917-1918.

	RACE OR CASTE.	Population by the Census of 1911.	Birth-rate for 1917.	Birth-rate for 1918.
Hindus.	Jains	20,460	13·97	22·38
	Brahmins	53,656	12·33	22·17
	Lingaits	1,179	61·91	67·85
	Bhatias	7,780	17·09	15·55
	Hindus of other Castes	547,192	18·71	18·20
	Hindus, Low Caste	54,235	56·99	63·88
Mussalmans (including Negro-Africans)		179,346	22·05	22·19
Parsees		50,931	28·27	27·40
Jews		6,597	38·95	34·86
Indian Christians		41,273	28·29	25·19
Eurasians		4,188	28·89	25·54
Europeans		11,894	16·64	17·99
Buddhists		578	19·03	27·68
Other and Unknown Castes		136	102·94	13·52
	Total	979,445	22·10	22·18

TABLE OF BIRTH-RATES FOR THE DIFFERENT SECTIONS OF THE CITY FOR 1917-1918.

Birth-rate by Sections.

Ward.	Sections.	Population by the Census of 1911.	Birth-rate for 1917.	Birth-rate for 1918.
A	Upper Colaba	1,557	59·08	55·87
	Middle and Lower Colaba	19,679	17·12	18·59
	Fort, Southern	3,462	10·39	10·68
	Fort, Northern	25,400	24·56	24·13
	Esplanade	17,761	15·53	17·28
B	Mandvi	33,202	14·72	13·28
	Chukla	24,231	18·77	16·34
	Umarkhadi	45,679	28·74	30·56
	Dongri	27,246	16·84	17·80
C	Market	30,172	10·83	11·56
	Dhobi Talao	38,684	22·77	22·72
	Fanaswadi	27,403	23·79	18·79
	Bhuleshwar	36,459	16·97	17·85
	Khara Talao	22,979	24·58	24·50
	Kumbharwada	27,703	24·11	24·00
D	Khetwadi	31,937	25·95	25·17
	Girgaum	30,779	24·98	23·94
	Chowpati	11,397	24·12	25·97
	Walkeshwar	10,640	23·59	26·69
	Mahalakshmi	26,302	27·79	25·96
E	Mazagon	30,075	25·10	26·73
	Tarwadi	28,424	31·55	30·57
	Second Nagpada	21,700	26·08	23·73
	Kamathipura	36,751	22·88	22·23
	Tardeo	27,758	26·40	28·49
	Byculla	75,348	25·46	25·25
	First Nagpada	6,414	27·43	23·38
F	Parel	45,474	19·08	20·20
	Sewri	19,067	22·76	23·86
	Sion	30,680	26·62	26·59
G	Mahim	30,492	31·02	33·58
	Worli	89,611	22·87	23·61
	Harbour, Docks, Railways and Homeless	44,979	·02	.....
	Total	979,445	22·10	22·18

In considering the birth-rates of the different sections of the City, it is necessary to bear in mind that these ratios cannot be of much value for purposes of comparison owing to the uneven distribution of women and married women of fertile age, which must largely account for the advantage which some sections may appear to exhibit over others.

The recorded birth-rate for the entire City is 22·18 and the sections with appreciably lower rates, excluding Fort Southern (which is mostly a business locality) are Middle and Lower Colaba (18·59), Esplanade (17·28), Mandvi (13·28), Chukla (16·34), Dongri (17·80), Market (11·56), Fanaswadi (18·79), Bhuleshwar (17·85), and Parel (20·20). The highest birth-rate was registered as in 1917 in Upper Colaba (55·87); it is however lower than in that year (59·08); the next lower is (33·58) in Mahim against 31·02 in 1917; and then (30·57) in Tarwadi against 31·55 in 1917. The lowest rate (10·68) was recorded, as in previous years, for Fort Southern which is not a residential locality; the next higher was (11·56) for Market section.

Total mortality and Death-rate.

The total number of deaths registered from all causes during the year was 58,388 against 33,390 in 1917, being 24,998 more than in the latter year.

The death-rate on the basis of the Census population (9,79,445) of 1911, which is much less than the actual population in 1918 as estimated, works out to 59·61 against 34·09 in 1917. The total mortality as compared with the preceding decennium (1908-1917) shows an increase of 25,058 and is equivalent to an increase in the death-rate of 25·59 per 1,000 living.

The mortality of the City steadily fell from 79,350 (rate 96·55) in 1900 to 59,495 in 1901 (rate 76·66), and from 52,874 in 1906 (rate 54·07) to 38,271 in 1908 rate (39·13); rose to 38,594 (39·77)in 1912 and then suddenly dropped to 31,806 (rate 32·47) in1913 and further declined in 1915 to 23,681 (rate 24·17) which was the lowest mortality recorded since the appearance of Plague in 1896.

Owing to causes already discussed, it rose to 30,574 (rate 31·21) in 1916 to 33,390 (rate 34·09) in 1917 and to 58,388 (rate 59·61) in 1918.

Corrected mortality.

The figure 58,388, however, represents the gross mortality of the City and is subject to correction. To arrive at a correct estimate, it is necessary, on the one hand, to exclude all deaths amongst persons newly arrived into the City and not belonging to it; on the other, to include all deaths which occurred among those who, belonging to it, died elsewhere. The resulting mortality may be termed corrected mortality. Mortality is generally corrected for differences of sex and age constitution of the population; but it may also be corrected for other considerations, such as the deletion of those, who not belonging to the City, helped to swell its mortality returns, and the inclusion of those, who belonging to it, went out to die either to their homes up-country or to the numerous outlying Sanatoria. Such adjustment is, quite as truly as the other, a process of correction and quite as necessary.

Adopting the suggestion of the Standing Committee of the Corporation (*vide* their Review of my Report for 1910), letters of enquiry were, as in previous years, addressed to the authorities in charge of the following out-lying Sanatoria and Convalescent Homes with a view to ascertaining the number of deaths among those who belonged to Bombay and went to the institutions for treatment or change of air ; (1) Deolali, (2) and (3) Nasik, (4) Dumas (Surat), (5) Khandala, (6) Poona, (7) Coorla, (8) Dharampore (Simla Hills), (9) Panchagani, (10) Karla, (11) Lonavla and (12) Bandra.

The replies received from 9 of them show that only 14 deaths among such persons occurred during 1918. It is obviously impossible to get at the number of those who died in their homes up-country ; we have no record of such deaths, nor can one be compiled. On the other hand, the number of deaths among new arrivals not belonging to Bombay was 3,274, including 1,230 deaths among inmates of the different War Hospitals in the City.

Applying these corrections, the mortality of the City, as based on the available data, works out to (58,388+14—3,274=)55,128 giving the ratio of 56·28 per thousand of population by the Census of 1911.

Such an estimate of the City's mortality is desirable, as it marks a greater approximation to the truth than the bare statement of the number of deaths in the population.

This approximation would be still closer, but for the absence of any data regarding deaths occurred up-country among the inhabitants of the City ; this absence largely accounts for, if it does not also accentuate, the disparity between the factors of inclusion and exclusion ; though as an offset against the possible reduction due to the omission of such deaths, may be mentioned those occurring among the undoubtedly large number who are attracted to the metropolis for various reasons—visitors bent on pleasure or business, vagrants, labourers in search of work, sick persons in search of expert medical advice or treatment, and others who come in order to be with their relations. In addition to these, there was a large influx from the various theatres of war due to Bombay being the chief port of embarkation and arrival of troops, and to its position as the capital of the Presideney and the facilities it offers for the care and comfort of the sick and wounded ; these, though not proper units of the population are counted among them when they happen to die after a stay of more than ten days.

It is, however, not improbable that in normal times and under normal conditions the number of deaths occurring outside Bombay among its inhabitants and the number recorded in the City among those not belonging to it more or less balance each other and the death-rate is not materially affected by the want of either figure.

The war and the presence of large number of troops and sick and wounded and labour passing through and returning from Overseas must have had some influence on these figures.

Mortality by Sex and Age-group.

The following table of mortality shows the proportional contribution to the total result under each age-group in the two sexes :—

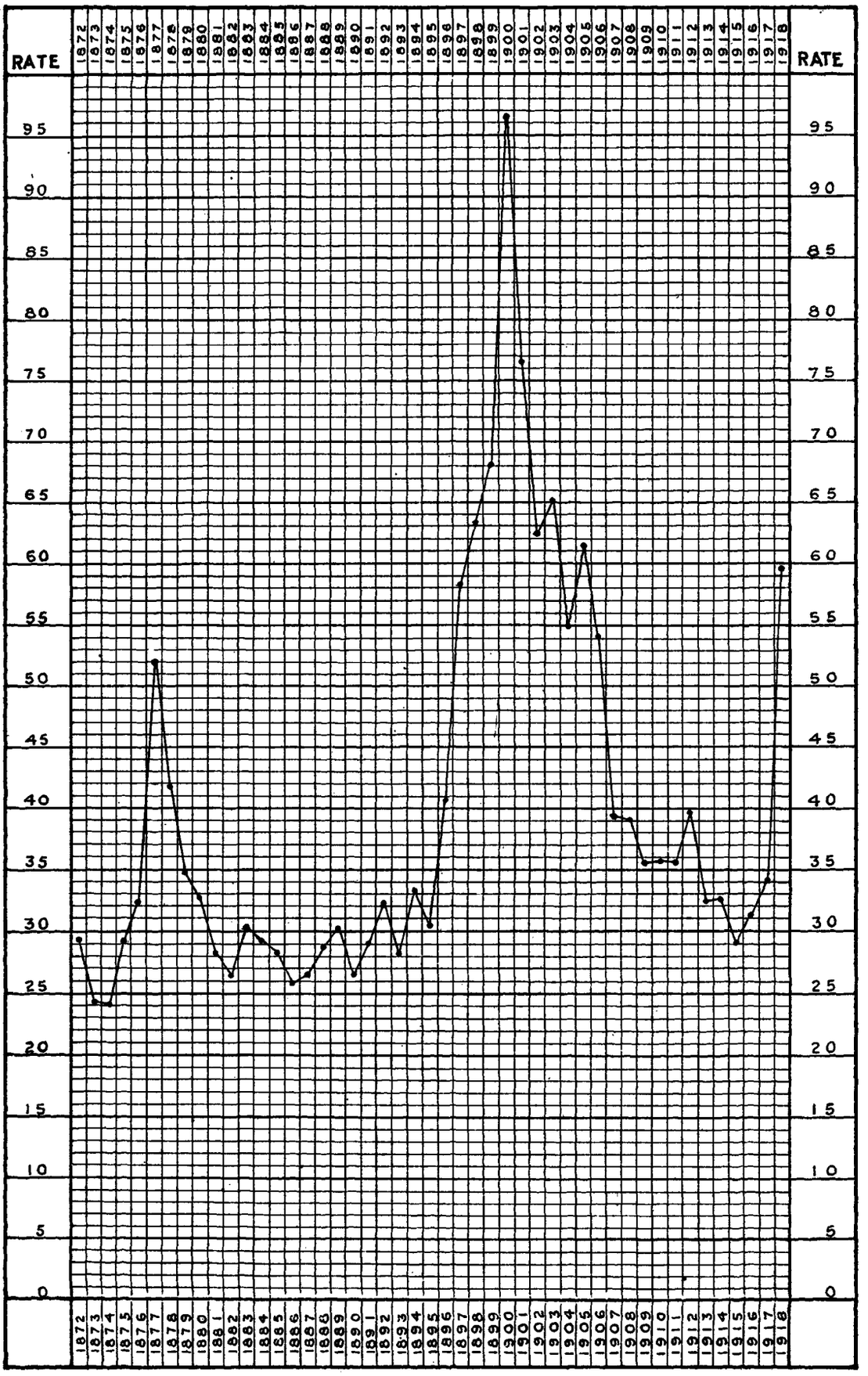
TABLE OF PERCENTAGES TO THE TOTAL MORTALITY BY AGE-PERIOD IN 1916, 1917 AND 1918.

Age-Period.	1916.		1917.		1918.					
					MALES.		FEMALES.		PERSONS.	
	Total Mortality.	Percentage.	Total Mortality.	Percentage.	No. of deaths.	Percentage.	No. of deaths.	Percentage.	No. of deaths.	Percentage.
Under 1 year... ...	8,215	26·86	8,870	26·56	6,752	20·81	6,077	23·42	12,829	21·97
1 to 5 years ...	3,602	11·78	3,939	11·79	3,659	11·27	3,820	14·10	7,479	12·80
5 to 10 „ ...	1,049	3·43	1,088	3·25	1,071	3·30	1,216	4·68	2,287	3·91
10 to 15 „ ...	1,052	3·44	1,018	3·04	889	2·74	1,054	4·02	1,943	3·32
15 to 20 „ ...	2,149	7·02	2,324	6·96	2,274	7·00	2,111	8·13	4,385	7·51
20 to 30 „ ...	5,149	16·84	5,443	16·30	7,029	21·66	4,749	18·30	11,778	20·17
30 to 40 „ ...	3,137	10·26	3,473	10·40	4,324	13·33	2,346	9·04	6,670	11·42
40 to 50 „ ...	2,010	6·57	2,318	6·94	2,642	8·14	1,322	5·09	3,964	6·78
50 to 60 „ ...	1,809	5·91	2,046	6·12	1,949	6·00	1.298	5·00	3,247	5·56
60 years and upwards.	2,393	7·82	2,687	8·58	1,841	5·67	1,951	7·52	3,792	6·49
Unspecified Ages ...	9	·02	4	·01	14	·04	.....	.....	14	·02
Total ...	30,574	100·00	33,390	100·00	32,444	100·00	25,944	100·00	58,388	100·00

DIAGRAM

ANNUAL DEATH-RATE IN BOMBAY

1872–1918.



SHRI KARUNESH P. PRESS BOMBAY

It will be observed that of the total number of 58,388 deaths in the year under review 32,444 were among males and 25,944 among females; the figures for 1917 were 18,838 males and 14,552 females. The male death-rate therefore works out to 50·67 and the female to 76·49 per 1,000 of sex population, against 29·42 and 42·90 respectively in the preceding year. This inequality of mortality among males and females is largely to be accounted for by the preponderance of males who form nearly two-thirds of the population. There is an excess of mortality among females over that among males in the age-periods upto 15 years of age (excepting the group of infants, that is children under one year of age), and under that of 60 years and beyond; in respect to other age-periods this predominance is reversed. It will also be observed that in the age-groups of 30-40 and 40-50 the mortality among males, (4,324 and 2,642) is almost the double of that among females (2,346 and 1,322 respectively).

The highest percentage of deaths to the total mortality among males (21·66) occurred in the age-period of 20-30 years; next, among children under 1 year (20·81); among females (23·42), as well as in the entire population (21·97), such percentage was recorded among children in the first year of life; next in the age-group of 20-30 years among females (21·66) and the whole population (20·17). The lowest percentage of mortality among males (2·74), females (4·02) as well as in the entire population (3·32) occurred during 10–15 years of life.

Infant mortality.

The total mortality among infants or children upto one year of age during the year under notice was 12,829. It was 3,959 more than in 1917 and 5,078 more than the average of the preceding quinquennium (1913-1917).

The percentage of infant mortality to the total mortality at all ages during the year was 21·97 against 26·56 in 1917 and 26·86 in 1916. The ratio per 1,000 of live births registered was 590·30 against 409·6 in 1917.

Corrected Infant mortality.

Infant mortality has been calculated above on the actual number of births registered; but for a correct estimate, it should be calculated on the corrected number of births, so as to include infants who died during the year without their births being registered. The corrected number of births, as we have seen above, works out to 29,504 and therefore gives an infant mortality equal to the ratio of 434·82 per 1,000 against 304·25 in 1917 and 278·48 in 1916.

The variations and the causes of infant mortality may be studied with the aid of the following table:—

TABLE OF INFANT MORTALITY BY MONTHS IN 1918 AND 1917.

MONTHS.	1918.						1917.
	Debility.	Nervous Diseases.	Respiratory Diseases.	All Causes.			All Causes.
				Males.	Females.	Total.	
January	283	131	290	474	419	893	624
February	255	128	300	439	449	888	612
March	244	175	431	623	558	1,181	802
April	251	193	359	561	495	1,056	710
May	214	139	298	470	414	884	725
June	199	140	333	491	420	911	598
July	262	183	405	580	541	1,121	894
August	253	139	250	438	391	829	868
September	309	287	594	809	697	1,506	856
October	418	267	882	991	887	1,878	725
November	251	108	224	409	314	723	660
December	327	157	282	467	492	959	796
Total	3,266	2,047	4,648	6,752	6,077	12,829	8,870

Infant mortality by Months.

The foregoing table exhibits the distribution of infant mortality by the different months of the year; three columns giving the number of deaths from causes most fatal to children have been added, as they serve to explain the monthly fluctuations and their extent.

Compared with 1917, the infant mortality in the year under review was higher month for month except in August when it was 39 less; the total increase recorded during the year under report was 3,959. The highest infant mortality in a month was 1,878 registered in October against 894 in July in 1917; the lowest was 723 registered in the month of November; this was 125 more than the lowest monthly figure for 1917, which was recorded in the month of June (598).

Out of the total increase of 3,959 deaths in 1918 as compared with 1917, nearly 44 per cent. (or 1,704 more deaths) were registered under Respiratory Diseases, 15 per cent. (or 622 more deaths) under Nervous Diseases (which include infantile convulsions), 14 per cent. (or 573 more deaths) under Debility.

Infant mortality from principal diseases.

It will be observed from the following table that Debility and the Diseases of the Nervous and Respiratory Systems were responsible in the aggregate for over 75 per cent. (9,745) of the total infant mortality (12,829), against nearly 79 per cent. (6,846) in 1917 and 73 per cent. in 1916.

Generally speaking, these are a group of causes which have reference to the social environment and economic condition of the parents, as regards the home and its surroundings, occupation of mothers entailing hard work, their habits and poverty, all of which affect the mother during pregnancy and influence the health of the child before and after birth and, aided by the unhygienic conditions in which a large proportion of the infants are born, help to swell the number of those who come into the world only to die.

INFANT MORTALITY FROM PRINCIPAL CAUSES FROM 1912 TO 1918.

Causes of Death.	1912.	1913.	1914.	1915.	1916.	1917.	Average (1913 to 1917).	1918.	Increase or Decrease.
Small-pox	274	55	60	64	259	70	102	**202**	+ 100
Measles	82	66	82	104	134	83	94	**217**	+ 123
All Fevers...	277	201	163	226	229	217	207	**403**	+ 196
Diarrhœa and Dysentery ...	900	615	579	670	481	417	552	**438**	— 114
Premature Birth	219	181	187	182	357	346	251	**367**	+ 116
Debility	2,581	2,207	2,187	2,381	2,165	2,496	2,287	**3,069**	+ 782
Diseases of the Nervous System.	1,570	1,278	1,271	1,384	1,317	1,411	1,332	**2,033**	+ 701
Do. do. Respiratory System.	2,877	2,113	2,425	2,414	2,543	2,939	2,487	**4,643**	+ 1,896
All Causes	9,646	7,488	7,580	6,602	8,215	8,870	7,751	**12,829**	+ 5,078

Comparison with quinquennial averages.

Compared with the averages of the preceding five years, the following increases were in evidence under the following causes: Small-pox + 100, Measles + 123, Fevers + 196, Debility + 782, Diseases of the Nervous System + 701, Diseases of the Respiratory System + 1,896; on the other hand, Diarrhœal Diseases registered a decrease of — 114. The total increase under all causes was of 5,078 deaths. The mortality among children born prematurely (367) during the year was higher than the average of the preceding five years (+ 116) and higher by 21 than in 1917.

Infant mortality by Age-periods.

The following table classifies the mortality from principal causes during 1918, among infants arranged under the three age-periods of 1-30 days, 1-6 months and 7-12 months; the corresponding figures for 1917 have been inserted for comparison. From an examination of the figures it will be noticed that to infants in the age-period of 7-12 months Small-pox

(101), Measles (122), Diarrhœa and Dysentery (299) and Diseases of the Respiratory System (2,847) were most fatal; while deaths due to the Diseases of the Nervous System (1,222) were most numerous in the age-group of 1-6 months, as those due to Debility (2,606) were in the first 30 days. Out of 367 deaths due to immaturity at birth, 365 occurred in the first month of life and the remaining 2 in the next age-period.

Further study of the subject may be pursued with the help of the following table which shows the percentage or proportion of mortality under each principal cause of death to the total mortality from all causes among infants in each of the three age-groups.

TABLE OF DEATHS AMONG INFANTS FROM PRINCIPAL CAUSES BY AGE-PERIODS IN 1918 AND 1917.

Age-Period.	Year.	Small-pox.	Measles.	Malaria.	Ague and Remittent Fever.	Diarrhœa and Dysentery.	Premature Birth.	Debility.	Nervous System.	Respiratory System.	All Causes.	Percentage of deaths in each age-period to total deaths under 1 year of age.
1 to 30 days ...	1918	5	3	...	35	21	365	2,606	168	104	3,487	27·18
	1917	1	...	3	19	17	340	2,178	233	79	2,975	33·54
1 to 6 months ...	1918	96	92	2	182	118	2	487	1,222	1,692	4,180	32·58
	1917	23	20	4	74	124	6	267	845	1,139	2,692	30·35
7 to 12 months ...	1918	101	122	2	179	299	...	76	643	2,847	5,162	40·23
	1917	46	63	6	111	276	...	51	333	1,721	3,203	36·11
Total ...	1918	202	217	4	396	438	367	3,169	2,033	4,643	12,829	...
	1917	70	83	13	204	417	346	2,496	1,411	2,939	8,870	...

Scrutinizing the foregoing table with the aid of the following, it will be noticed that out of 21,733 children registered as born during the year, 3,487 or 512 more than in 1917 died within the first month of life; for nearly three-fourths of these (2,606 or 74·7 per cent. against 2,178 or 73·21 per cent. in 1917), the cause of death assigned was Debility, that is want of vitality, immaturity at birth, wilful or ignorant neglect and the method adopted by the unskilled or untrained women attending the labour: (ii) 4,180 or 1,488 more than in 1917 died before attaining the age of six months; the cause of death in the descending order of incidence being 40·47 Diseases of the Respiratory System (against 42·39 in 1917); 29·23 Diseases of the Nervous System (convulsions) against 31·39 in 1917; 11·65 Debility (against 9·92 in 1917) and 435 Ague and Remittent Fever against 2·74 in 1917.

It will be observed that of the total mortality under 1 year of age, more than 27 per cent. occurred in the first month of life and, further, that of the deaths at this early period of life nearly three-fourths were due to Debility and in the second and third groups the highest proportion of deaths was associated with the Diseases of the Respiratory System. The next most fatal cause is the Diseases of the Nervous System in the second group and Diarrhœa and Dysentery in the third, all of which denote exposure and defective feeding.

TABLE OF PERCENTAGES OF INFANT DEATHS FROM PRINCIPAL CAUSES IN 1918.

Age-Period.	Small-pox.	Measles.	Malaria.	Ague and Remittent Fever.	Diarrhœa and Dysentery.	Premature Birth.	Debility.	Nervous System.	Respiratory System.	All Causes.
1 to 30 days	·14	·08	...	1·00	·60	10·46	74·73	4·81	2·98	27·18
1 to 6 months	2·29	2·20	·04	4·35	2·82	·04	11·65	29·23	40·47	32·58
7 to 12 months	1·95	2·36	·03	3·46	5·79	...	1·47	12·45	55·15	40·23
Total ...	1·57	1·69	·03	3·08	3·41	2·86	24·70	15·84	36·19	...

INFANT MORTALITY BY CASTE AND INFANTILE DEATH-RATE PER 1,000 OF BIRTHS REGISTERED IN EACH CASTE IN 1917 AND 1918.

	RACE OR CASTE.	1917.			1918.		
		Deaths under 1 year.	Number of Births registered.	Infant mortality per 1,000 of Births in each caste.	Deaths under 1 year.	Number of Births registered.	Infant mortality per 1,000 of Births in each caste.
HINDUS.	Jains	393	286	1,374·12	587	458	1,281·65
	Brahmins	417	662	629·90	552	653	845·32
	Lingaits	51	73	698·63	91	80	1137·50
	Bhatias	48	133	360·90	75	121	619·83
	Hindus of other Castes ...	4,137	10,241	403·96	5,829	9,963	585·06
	Hindus, Low Caste ...	1,501	3,091	485·60	2,533	3,465	731·02
	Mussalmans (including Negro-Africans).. ...	1,591	3,956	402·17	2,274	3,980	570·35
	Parsees	204	1,440	141·66	228	1,396	163·32
	Jews	43	257	167·31	64	230	278·20
	Indian Christians... ...	409	1,168	350·17	506	1,040	486·53
	Eurasians...	24	121	198·34	29	107	271·02
	Europeans	23	198	116·16	24	214	112·14
	Buddhists	2	11	181·81	1	16	62·50
	Other and unknown Castes	27	14	1,928·57	36	10	3,600·00
	Total ...	8,870	21,651	409·68	12,829	21,733	590·30

Infant mortality by race or caste.

The foregoing table gives the number of deaths among infants and of births registered in the different races of the population, and the infantile death-rates calculated per 1,000 of births registered in the particular race or caste. Corresponding figures for 1917 have been added for comparison.

What arrests attention in the table is that among Jains 458 children were registered as born in the City during 1918, while the number of deaths among infants who died in the year was 587 ; similarly among Lingaits and among "other and unknown castes" 80 and 10 children were registered as born and 91 and 36 children as having died in the year. This apparent paradox is to be explained principally by the omission or neglect of parents to register the births, and also by the custom of expectant mothers going out to their homes up-country for delivery and returning to Bombay with the child some months old : possibly also a large proportion of the deaths occurring among infants born in the latter part of the preceding year has some effect on these figures.

Compared with 1917, a considerable improvement is noticeable in the infantile death-rates among Jains (from 1374·12 to 1281·65) and among Buddhists (from 181·81 to 62·50) and a slight one among Europeans (from 116·16 to 112·14) ; all other communities recorded an increase.

Among Hindus of all castes as a whole and Mussalmans, who together form the bulk of the City's population, the ratios stand as under :—

	1917.	1918.	Increase.
Hindus	451·9	655·8	203·9
Mussalmans	402·1	570·3	168·2

The infantile death-rate for the entire City calculated on the total number of registered births was 590·30. The highest death-rate, calculated for different castes on the number of births registered among them, was recorded among Jains 1281·6 and the next lower among Lingaits (1137·50), and the lowest 62·50 among Buddhists against 116·16 among Parsees in the preceding year. In the ascending order of incidence, after Buddhists stand Europeans (112·14), Parsees (163·32), Eurasians (271·02), Jews (278·20), Indian Christians (486·53), Mussalmans (570·35), Hindus of other Castes (585·06), Bhatias (619·83), Hindus, Low Caste (731·02), Brahmins (845·32), and Lingaits (1137·50).

The ratios among principal communities during 1918 and the preceding five years are given in the following table :—

RATIO OF INFANT MORTALITY PER 1,000 OF BIRTHS REGISTERED IN THE CASTE.

Race or Caste.	1913.	1914.	1915.	1916.	1917.	1918.
Hindus. Jains, Brahmins, Lingaits, Bhatias, Hindus of other Castes, Hindus, Low Caste	408·03	410·4	350·9	420·3	451·9	655·83
Mussalmans (including Negro-Africans)	369·55	391·0	335·6	403·2	402·1	570·35
Parsees	188·1	173·6	153·2	129·5	141·6	163·32
Jews	176·4	159·6	157·8	220·6	167·3	278·20
Indian Christians	419·0	398·1	336·2	340·7	350·1	486·53
Eurasians	151·9	207·4	152·5	152·7	116·1	271·02
Europeans	230·0	244·2	181·8	190·4	198·3	112·14

Infant mortality by Sections.

With a view to measuring the relative incidence of infant mortality in the different sections of the City, the following table is given showing the ratio of infantile deaths registered in each section to the number of births registered in that particular section. Apart from the irregular distribution of the female population in the different wards of the City, such measurement of the infant mortality is not altogether reliable owing to the following factors which inevitably introduce an element of error or uncertainty in the calculations based on the sectional data. The difficulties in registering all births occurring in the City, consequent on parental ignorance or neglect, varying with the class of people inhabiting the different sections ; the prevailing custom of sending prospective mothers home to their native districts for confinement, resulting in an excess of infants in the City over births actually occurred and registered in it ; the inflation of the infantile death-rate due to out-born infants dying in the City; the inter-sectional movement of population, making it possible for children born in one section to die in another; and, lastly the migratory habits of the higher official and the affluent classes who send out their families to the most congenial or least inconvenient latitudes during certain seasons of the year. All these causes operate in varying degrees in the different sections of the City and influence the infantile death-rate.

The rate of infant mortality for the entire City in 1918 based on the number of births actually registered was 590·3 against 409·6 in 1917 and 387·8 in 1916; and the sections which showed a higher incidence of such mortality during the year under review were :—

All the sections of B Ward, namely, Mandvi (1024·9) ,Chukla (709·5), Umarkhadi (609·5), Dongri (709·2); Market (830·94), Fanaswadi (629·1), Bhuleshwar (714·2), Kumbharwada (580·4) in C Ward, Girgaum (544·4) in D Ward, Second Nagpada (714·5), Kamathipura (703·7), Byculla (754·5) in E Ward; Parel (643·0) and Sewri (674·7) in F Ward and Worli (604·4) in G Ward.

These sections excepting Fort Southern, which is mainly a business locality, are among those with which a high rate of mortality is generally associated, being largely inhabited by the poor and ignorant classes living in insanitary houses and amidst similar surroundings. Mandvi registered the highest death-rate (1024·9) and Fort Southern (189·1) the lowest in the year under review.

Compared with 1917, all the sections of the City exhibit a considerable enhancement in the death-rate among infants, except Upper Colaba and Esplanade which show a slight reduction; the former from 315·2 to 310·3 and the latter from 347·8 to 342·0.

STATEMENT OF THE RATIO OF DEATHS AMONG CHILDREN UNDER 1 YEAR PER 1,000 OF BIRTHS REGISTERED IN EACH SECTION IN 1917 AND 1918.

Ward.	Sections.	1917.	1918.	Ward.	Sections.	1917.	1918.
A	Upper Colaba	315·2	310·3	E	Mazagon	402·6	671·6
	Middle and Lower Colaba.	353·1	456·2		Tarwadi	328·8	565·0
	Fort, Southern	111·1	189·1		Second Nagpada	459·3	714·5
	Fort, Northern	323·7	504·0		Kamathipura	493·4	703·7
	Esplanade	347·8	342·0		Tardeo	348·7	475·3
B	Mandvi	623·7	1024·9		Byculla	536·2	754·5
	Chukla	479·1	709·5		First Nagpada	323·8	333·3
	Umarkhadi	392·9	609·5				
	Dongri	442·2	709·2	F	Parel	482·7	643·0
C	Market	611·6	830·9		Sewri	483·8	674·7
	Dhobi Talao	340·5	481·2		Sion...	351·2	477·9
	Fanaswadi	358·8	629·1				
	Bhuleshwar	453·0	714·2	G	Mahim	332·9	453·1
	Khara Talao	437·1	507·9		Worli	456·5	604·4
	Kumbharwada	375·7	580·4				
D	Khetwadi	314·8	430·3		Harbour, Docks, Railways and Homeless	..	...
	Girgaum	371·9	544·4				
	Chowpati	250·9	334·4				
	Walkeshwar	235·0	330·9		Total ...	409·6	590·3
	Mahalakshmi	284·5	440·7				

Infant mortality by the number of rooms occupied.

NUMBER OF BIRTHS AND INFANT MORTALITY BY THE NUMBER OF ROOMS OCCUPIED IN 1918.

		1 Room and under.	2 Rooms.	3 Rooms.	4 or more Rooms.	Roadside.	Hospitals.	Total.
Births		14,442	2,117	515	578	30	4,051	21,733
Infant Mortality		11,081	1,056	193	138	40	321	12,829
Infant Mortality per 1000 births registered.	1918	176·72	49·88	37·47	23·87	133·33	7·92	59·03
	1917	48·14	43·04	27·15	26·57	112·19	11·76	40·96

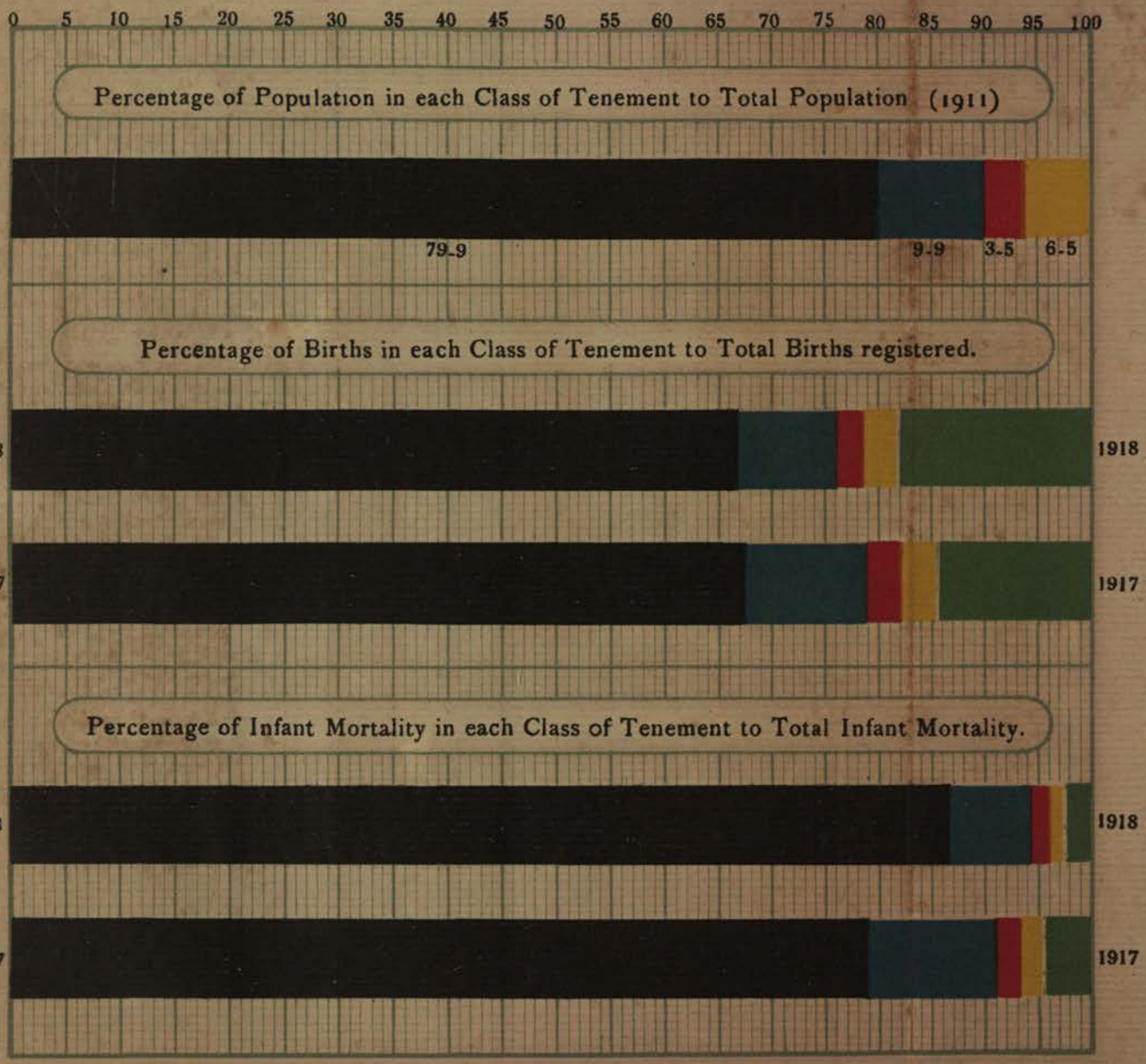
It will be observed from the fore-going statement that of the 21,733 live-births registered during the year, 14,442 or 66·45 per cent. occurred in families living in a single room or sharing it with others and the number of deaths among such was 11,081 or 76·72 per cent. of the births; this proportion varies inversely as the number of rooms occupied; 49·8 per cent. in the case of two-room tenements, 37·4 per cent. in the case of three-room tenements, and 23·8 per cent. in families occupying 4 or more rooms. The lowest percentage of infant mortality (7·9) occurred among children born in Hospitals. The corresponding figures for 1917 are also given in the table.

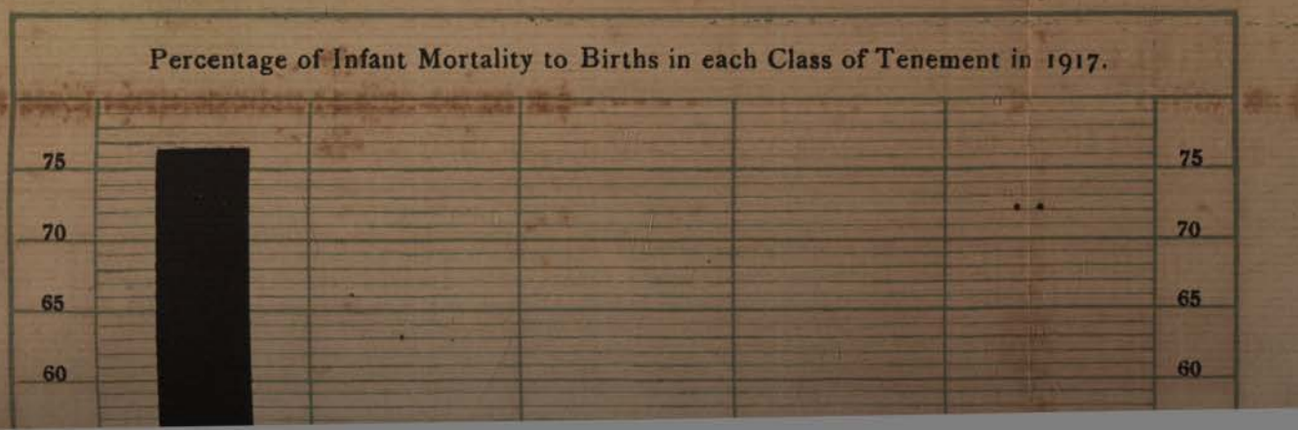
Measures for reducing Infant mortality.

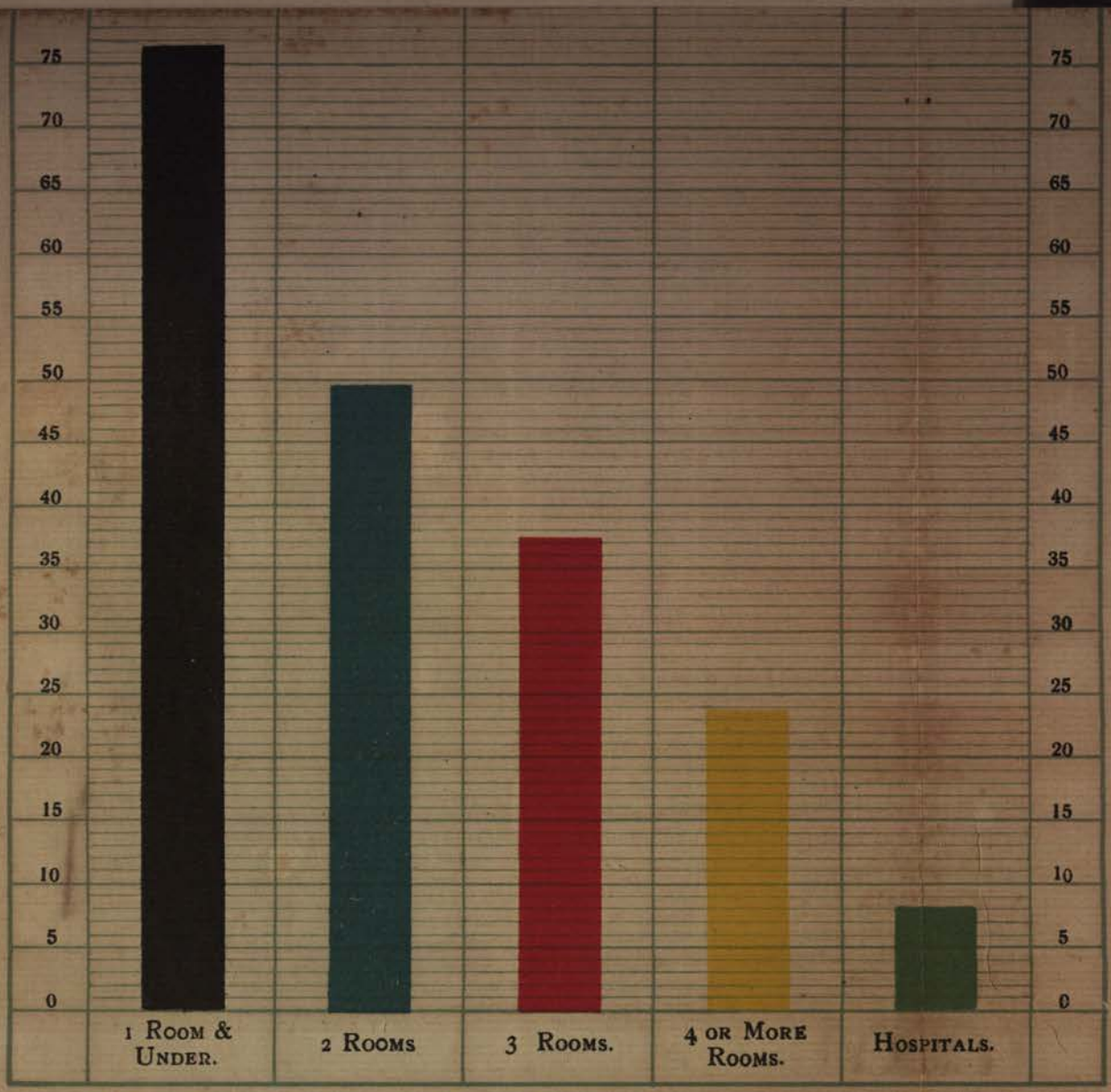
The Municipal Nurses and the Health Visitors of the Sanitary Association and the Lady Willingdon Scheme, who are all qualified midwives, daily visit the localities and the chawls inhabited by the poor and help to diffuse and popularize elementary knowledge of the principles of health and hygiene and carry such knowledge and habit into the homes and lives of the ignorant; they give advice on the prevention of disease and the care and up-bringing of infants, and bring to the notice of the authorities unregistered births, unvaccinated children and cases of sickness; they also find out prospective mothers among the poor and induce them to go to the Maternity Homes provided for them free; and where such recourse is not sought, attend on the women in their own homes providing them with necessaries in the shape of milk, blanket, charpoy, &c. The visits of Nurses and Health Visitors are frequently the means of bringing to the Municipal Dispensaries the suffering poor who

DIAGRAM

PERCENTAGE OF POPULATION, BIRTHS AND INFANT MORTALITY, IN EACH CLASS OF TENEMENT 1918


0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100
Percentage of Population in each Class of Tenement to Total Population (1911)
79-9
9-9
3-5
6-5
Percentage of Births in each Class of Tenement to Total Births registered.
1918
1918
1917
1917
Percentage of Infant Mortality in each Class of Tenement to Total Infant Mortality.
1918
1918
1917
1917





N. B.—Blank space between yellow and green colours represents p. c. of Road-side Births and Infant Mortality.

P. C of Road-side Infant Mortality to Road-side Births in 1918-133-33.

SHRI KARUNESH P. PRESS, BOMBAY No 4

would otherwise either not know of the existence of facilities provided or knowing would through carelessness neglect to benefit by them. These visits are therefore doing much good and are welcomed and appreciated by those for whose benefit they are paid. There were during 1918 three Maternity Homes for the poor—two Municipal—one at Bellasis Road and the other at Parel and one under the Lady Willingdon Scheme at Victoria Bunder, Colaba which has been closed since 1st March, 1919.

The measures for the reduction of infant mortality group themselves comprehensively under maternity and infant welfare. So far as the Health Department is concerned, definite work in this direction may be said to have commenced with the appointment in 1902 of Municipal Nurses and Midwives for the benefit of the poor. No doubt the sanitary work done in previous years benefited both mother and infant, but attendance on confinements, domiciliary visits for homely talks and instruction of mothers in domestic and personal hygiene and in the feeding and rearing of infants commenced in 1903. The Bombay Sanitary Association started in 1904 appointed a couple of Health Visitors whose work supplemented that done by the Municipal Nurses. In 1907 a forward step was taken by adding to the duties mentioned above the work of inquiring into the condition of newly born infants and recording the results. In 1912, the Corporation sanctioned a grant of Rs. 1,000 for providing necessaries of life, such as milk, loaves, blanket, charpoy, etc., to poor women during the lying-in period. The work received a great impetus on the formation, by the Bombay Sanitary Association in 1914, of the Lady Willingdon Scheme for securing proper treatment for women during confinement and proper care of infants after birth. The Scheme appointed a dozen lady Health Visitors (qualified midwives) to supplement the work done by the Corporation midwives, established three comfortable Maternity Homes, the first in February 1915, the second in March 1916, and the third in September 1916, arranged lectures to Indian *dais* with a view to teaching (1) how to conduct normal cases, (2) the value of cleanliness and aseptics while confining patients, (3) the dangers both to mother and child from neglect and dirt; and also organised for poor women who could read and write and were willing to be trained a six months course of instruction and training to attend on normal cases, paying each such woman a stipend of Rs. 10 per month. Further, the Scheme added in May 1917 an Infant Milk Depôt to each of the three Homes for distributing pure pasteurised milk, free or at a very nominal price, for the benefit of children born in these Homes or under the supervision of the Health Visitors or the Municipal midwives. Milk worth about Rs. 700 is being thus distributed every month.

The work done by these institutions, the Bombay Sanitary Association and the Lady Willingdon Scheme, has been carried on in close co-operation with the Health Department; this has been greatly facilitated by reason of the Executive Health Officer being their Honorary Secretary and Treasurer and by his having their organisations and activities under his direction and control. Two of these Maternity Homes at Bellasis Road and Parel (16 and 13 beds) have been taken over by the Municipality; the third (6 beds) being not very favourably situated (at Victoria Bunder, Colaba) did not attain the success of the other two and was closed at the end of February 1919. But a proposal to open more Homes is before the Corporation. Her Excellency Lady Willingdon was able to secure a donation of Rs. 5,00,000 to the Municipality for this purpose from the Trustees of the late Haji Sabu Sidick and it has been decided to open three new Homes. (One of these has been started from 1st June, 1919 at Imamwada Road, opposite the Mogul Musjid, for women of all castes). When the (remaining two) Homes are opened and the proposed Maternity Ward of 48 beds is provided in the King Edward Memorial Hospital under construction in the north of the island, Bombay will be well-equipped in point of Maternity Homes for the difficult task of controlling infant mortality.

It may be added that Her Excellency the Hon'ble Lady Lloyd having interested herself in the work started under the Lady Willingdon Scheme, a further step has been taken and it has been decided to open "Infant Welfare Centres" in different parts of the City.

The work done at these Centres will be :—(1) Advice and instruction to mothers as to infant management, (2) medical aid and advice for infants, (3) Day Nurseries (Crèches), (4) Appropriate home visiting.

Each of these centres will be in charge of a lady doctor, and a qualified nurse will be in permanent attendance. Health Visitors will also be attached, clothing will be supplied in urgent cases, and if funds allow, milk will be supplied to mothers who are not able to nurse their infants. The Nurses and Health Visitors will bring the child and mother to the Centre at certain hours. The children will be examined by the lady doctor and the nurse. Advice will be given to the mother and medical aid where necessary. The Health Visitor and Nurse will visit the houses of the children and give practical instruction in carrying out the doctor's advice.

The first of these was opened on the 2nd April 1919 at Sleater Road (Grant Road) in the premises of Dr. Mrs. J. R. Dadabhoy's Lying-in Hospital. It combines a crêche with free medical advice and treatment for mothers and babies, and is located on the ground floor of a cool and airy house facing Grant Road Station. There is accommodation for a number of babies, in addition to a consulting-room and dispensary. Dr. Mrs. J. R. Dadabhoy, M.D. (London), is the Honorary Physician in charge.

The successful prosecution and development of such work depends on a variety of circumstances. Speaking generally, the trend of local public sentiment, the social condition and resources, the intelligence of the population, the extent of enlightened public opinion, are all factors which either encourage or retard progress in sanitation as in other things; they are reflected in the character of the representatives elected to the governing bodies, local boards, and councils. They are factors which influence the extent to which voluntary effort and the generous impulses of philanthropic people can be organised to co-operate with the sanitary authority so as to produce the most useful and best results. These variations of public sentiment explain why in one place almost all efforts emanate from official centres, whilst in others the lead is taken by voluntary associations, and there are yet others in which voluntary and official efforts are well and harmoniously co-operating with benefit to every interest concerned.

It is undeniable that many sanitary authorities have even now made little, if any, effort to promote schemes in connection with infant and maternal welfare; voluntary agencies, not infrequently, have actively supplied these omissions, and are indispensable and preferable, because they are run by progressive, open-minded people. On the other hand, there are many sanitary authorities who have wisely and well considered the question, and have made great progress.

Voluntary agencies have in the past done most of the pioneer work in educational and social reform and especially with regard to infant and maternal welfare and now the work is being taken up by local sanitary authorities.

Public opinion has been stimulated by these agencies and many institutions have been provided and much money raised for establishment and maintenance.

It is an educated public opinion which presses the sanitary authorities to adopt such measures.

The State now recognises acutely the claims of mothers and children, and in England and other countries, grants are given by Government to all deserving schemes.

The conditions of War have deeply emphasised these obligations of the State and the local authorities to undertake what has hitherto been done by voluntary agency.

It has often been pointed out that poverty, ignorance, neglect and insanitary surroundings are the principal causes of high infant mortality. Efforts to educate the people in the principles of domestic and personal hygiene and improve their squalid environment are being made from year to year, but the social and economic factor is one with which the Health Department can hardly hope to grapple alone with much hope of success. Voluntary efforts and private agencies need therefore to be encouraged as much as possible. Bombay with its large and growing population and huge proportion of poor (more than 79 per cent.) offers a very wide field for many such agencies which can be linked up closely with its sanitary administration as in the cities of the West. In its efforts for the sanitary improvement of the home and surroundings, for the education of the people in sanitation and hygiene, and the reduction of infant mortality, the Health Department is indebted already to two such agencies whose activities run along closely parallel lines, namely the Bombay Sanitary Association and the Lady Willingdon Scheme, the details of whose work have already been given. But the problem is not an easy one and its magnitude and complexity may be gauged from the following figures which may be taken to indicate the mass of young life to be dealt with in this City, and the number of mothers, the great majority of whom require care and assistance during pregnancy and the best assistance possible during and after confinement:—

No. of women 15 to 45 years of age by the Census of 1911	2,08,516
No. of babies actually registered as born alive during 1918	21,733
No. of babies estimated to have been born alive during 1918	29,399
No. of still-births during 1918	2,066
„ infants who died during 1918	12,829

Work of the Municipal Nurses and Health Visitors.

As to the Municipal Nurses and Midwives, who are ten in number working under the ten District Registrars, they paid during the year 23,883 visits to houses, chawls and huts (against 29,584 in 1917), enquired into 2,931 cases of ordinary sickness, reported 952 cases of infectious diseases and 1,009 deaths among the female population of the City. They also attended 1,382 confinements (against 1,604 in 1917) and ascertained 9,385 births.

The following table shows the work of the ten Municipal Nurses and Midwives so far as attendance on confinements and infant visitations are concerned. They have to repeat their visits even after the lying-in period to find out, as far as possible, and warn the mothers against the conditions and influences which imperil infant life.

SUMMARY OF INQUIRIES AND OF WORK OF MUNICIPAL NURSES AND MIDWIVES, 1909-1916.

——	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	**1918.**
Total number of births (including still-born) registered ...	21,645	21,505	23,135	23,186	21,236	21,240	21,584	22,867	23,539	**23,799**
Percentage of still-births to the total number of births registered	8·3	7·2	7·6	7·1	7·4	7·3	7·0	7·3	8·0	**8·6**
Number verified by the Nurses.	13,677	12,762	13,578	14,417	13,639	13,950	13,571	14,263	15,183	**13,256**
Percentage of the number verified to the total... ...	63·1	59·3	58·7	62·1	64·2	65·6	62·8	62·3	64·5	**55·6**
Percentage of the confinements unattended	18·0	15·2	12·7	13·0	12·8	9·5	6·3	4·9	4·9	**4·4**
Percentage of the confinements attended by unskilled women	58·3	59·6	60·7	59·6	60·0	63·1	61·1	61·1	57·9	**55·4**
Percentage of the confinements attended by qualified Nurses (including Municipal) ...	11·3	12·0	13·2	13·9	14·2	13·7	15·9	14·5	15·5	**16·0**
Percentage of the confinements attended by Municipal Nurses	4·5	5·6	5·5	6·6	8·7	8·7	10·5	9·4	10·5	**10·4**
Percentage of children born in Hospitals	12·3	13·2	13·2	13·5	12·8	13·5	16·6	19·3	21·4	**23·8**
Percentage of children born in healthy condition	67·8	68·9	74·9	73·7	71·9	75·2	76·6	78·2	79·2	**75·5**
Percentage of children fed on breast...	64·9	59·8	69·7	66·5	68·4	62·7	70·1	69·9	75·2	**69·1**
Percentage of children dying within 30 days	12·3	11·8	11·5	11·8	10·7	10·6	9·7	10·3	11·3	**13·3**
Percentage of the cases where the mothers left home for work	31·3	27·9	34·4	29·7	30·6	33·0	33·2	32·3	36·0	**36·1**

From an examination of the fore-going table it will be noticed that of the total number of 23,799 births (inclusive of still-births) registered in the City during the year under review, 13,256 or 55·6 per cent. were verified by the Municipal Nurses and Midwives; the figures show a decrease of 8·9 in the verification work compared with the preceding year.

The proportion of still-births shows a slight increase of ·6 over the figure for 1917.

The proportion of births wholly unattended declined by ·5 during the year to 4·4, the lowest on record.

The percentage of confinements attended by unskilled women was 55·4 against 57·9 in 1917, and the lowest recorded. The percentage of confinements attended by qualified Nurses (including Municipal) was 16·0. This was higher than in any other previous year since 1909. The percentage of confinements attended by Municipal Nurses was 10·4 against 10·5 in 1917 and 9·4 in 1916.

The percentage of children born in Hospitals was the highest (23·8) showing an increase of 2·4 over the figure for 1917 and of 11·5 since 1909. This rise may be accounted for by the increasing number of Lying-in Hospitals in the City.

The percentage of children born in a healthy condition was 75·5 as compared with 79·2 in the preceding year.

The percentage of children fed on breast was 69·1 being 6·1 lower than in 1917.

The percentage of mothers who left home for work leaving their children to the care of others shows an increase of ·1.

The percentage of children dying within 30 days of birth (13·3) rose by 2 per cent. compared with 1917.

Relief to poor women during confinement in the shape of necessaries and comforts such as milk, loaves, bed, blanket, charpoy, linen, &c., was continued during the year and dispensed in 304 cases against 551 in 1917.

The reduced figures of work are attributable largely to the Influenza and Cholera epidemics and to the Nurses and Health Visitors having been withdrawn from their usual duties and detailed to the Municipal Hospitals to attend on the sick owing to the difficulty of securing temporary Nurses.

Municipal Maternity Homes.

648 women were admitted during the year against 512 in 1917 in the Municipal Maternity Home at Bellasis Road and 280 women from 1st May to 31st December in the Home at Parel, which was taken over by the Municipality on the 1st May, 1918.

The following two statements furnish details of these cases by months and as to the Wards from which they came and the communities to which they belonged.

STATEMENT OF CASES FROM DIFFERENT WARDS ADMITTED AND TREATED IN 1918:—
(1) AT THE MUNICIPAL MATERNITY HOME AT BELLASIS ROAD.

Wards.	Hindus.	Mussalmans.	Jews.	Indian Christians.	Other Castes.	Total.
A	...	1	...	...	...	1
B	33	7	16	6	2	64
C	16	8	...	4	...	28
D	12	1	..	9	...	22
E	292	36	53	103	7	491
F	5	1	...	6	...	12
G	10	2	13	4	1	30
Total ...	368	56	82	132	10	648

(2) AT PAREL ROAD MATERNITY HOME (12BEDS) (1ST MAY TO 31ST DECEMBER 1918.)

Wards.	Hindus.	Mussalmans.	Jews.	Indian Christians.	Other castes.	Total.
A	2	...	...	...	...	2
B	8	8	3	1	...	20
C	...	...	...	...	...	...
D	...	...	...	...	...	...
E	161	16	27	32	2	238
F	11	1	...	4	1	17
G	2	...	1	...	...	3
Total ...	184	25	31	37	3	280

STATEMENT OF CASES ADMITTED AND OF THOSE CONFINED MONTHLY AT THE MUNICIPAL MATERNITY HOMES DURING 1918.

MONTH.	Bellasis Road Maternity Home.		Parel Road Maternity Home (1st May to 31st December 1918).	
	No. of Cases admitted.	No. of Cases confined.	No. of Cases admitted.	No. of Cases confined.
January	50	42	.....	.....
February	56	47	.....	.....
March	55	50	.....	.....
April	46	41	.....	.....
May	52	48	27	22
June	53	50	37	27
July	58	57	36	30
August	57	52	41	31
September	62	59	30	21
October	50	49	41	33
November	54	53	30	23
December	55	52	38	33
Total ...	648	600	280	220

Table showing the Daily Total Mortality (excluding Still-born) in 1918 :—

Date.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1 ...	129	118	147	122	95	87	215	81	72	628	142	100
2 ...	135	96	136	145	120	104	212	89	88	733	137	97
3 ...	142	103	143	122	103	96	230	68	90	694	118	84
4 ...	133	118	122	148	113	107	222	88	107	724	107	95
5 ...	135	113	140	148	122	91	182	86	108	671	123	110
6 ...	130	106	136	152	130	99	177	95	110	768	112	96
7 ...	137	103	164	151	111	102	184	90	111	735	119	99
8 ...	115	123	131	145	113	101	181	86	113	639	130	99
9 ...	142	125	131	159	125	78	185	106	110	582	106	134
10 ...	121	125	130	159	117	85	192	85	119	521	113	132
11 ...	104	122	114	162	102	89	143	102	138	489	102	144
12 ...	131	121	131	157	97	95	147	74	149	415	114	163
13 ...	93	138	129	163	115	77	155	92	166	384	127	170
14 ...	115	130	155	153	108	99	129	95	166	350	111	194
15 ...	138	96	143	164	98	102	126	94	181	338	109	210
16 ...	109	108	121	161	117	101	113	73	219	290	94	246
17 ...	127	113	147	134	114	98	96	98	239	263	106	225
18 ...	112	131	147	133	109	105	100	98	278	285	94	224
19 ...	129	141	140	152	89	98	102	76	314	241	113	258
20 ...	93	128	147	148	114	92	99	91	270	227	101	258
21 ...	121	144	127	142	120	101	103	90	382	207	103	208
22 ...	140	126	129	139	107	106	92	73	360	184	113	180
23 ...	123	144	117	138	111	106	86	80	427	204	125	225
24 ...	85	144	120	125	102	106	95	78	392	162	96	177
25 ...	93	139	137	151	104	124	91	103	377	196	85	227
26 ...	103	121	142	124	87	130	86	108	499	178	99	264
27 ...	112	143	159	125	113	174	92	86	547	175	79	252
28 ...	108	121	134	124	86	182	86	89	584	153	101	276
29 ...	125	...	117	139	111	207	96	120	682	141	78	264
30 ...	124	...	137	148	74	228	97	88	712	135	85	311
31 ...	116	...	128	...	92	...	108	118	...	135	...	264
Total ...	3,719	3,440	4,207	4,323	3,319	3,370	4,222	2,800	8,110	11,850	3,242	5,786

Mortality in Hospitals.

The following statement gives the number of deaths in Hospitals from various diseases during 1917 and 1918. The number of such deaths in the year under report was 5,992 against 3,638 in 1917 and their proportion to the total mortality was 10·2 against 10·8 in the preceding ing year : —

Cause of Death.	1917.		1918.	
	Hospital Deaths.	Total Mortality.	Hospital Deaths.	Total Mortality.
Still-born	457	1,888	434	2,066
Small-pox	84	269	354	1,024
Measles	5	221	8	486
Plague	390	1,706	269	1,143
Fever	195	2,449	185	4,553
Cholera	28	61	246	1,662
Diarrhœa and Dysentery	331	2,591	301	2,797
Puerperal Septicæmia...	8	252	11	324
Leprosy	82	84	102	124
Premature Birth	181	346	199	368
Other General Diseases	882	7,477	1,926	14,352
Diseases of the Nervous System	158	2,063	168	2,749
,, ,, Circulatory System	76	369	107	413
Phthisis	99	1,448	160	*1,591
Diseases of the Respiratory System	533	11,231	1,380	23,487
,, ,, Digestive System	258	1,475	269	1,920
,, ,, Urinary System	91	292	88	268
,, ,, Generative System	63	219	45	216
Other Local Diseases	52	118	80	135
Injuries	116	674	92	643
Unspecified Causes	6	45	2	133
Total (except Still-born) ...	3,638	33,390	5,992	58,388
Percentage to the Total Mortality ...	10·8	...	10·2	..

Mortality from principal causes of death.

Table of Deaths and Death-rates from some of the principal causes of death in 1918, compared with those in 1917 and the average of the preceding 10 years.

Cause of Death.	1917.		1918.		Average of 10 years (1908 to 1917).	
	Number of Deaths registered.	Rate of Mortality per 1,000 of Population.	Number of Deaths registered.	Rate of Mortality per 1,000 of Population.	Number of Deaths registered.	Rate of Mortality per 1,000 of Population.
Small-pox	269	·27	1,024	1·04	604	·61
Measles	221	·22	486	·49	289	·29
Fevers (including Scarlet, Enteric, Malaria, Ague, Remittent and Relapsing).	2,449	2·50	4,553	4·64	2,864	2·92
Cholera	61	·06	1,662	1·69	340	·34
Plague	1,706	1·74	1,143	1·16	2,977	3·04
Phthisis	1,875	1·91	2,246	2·29	1,997	2·03
Diseases of the Nervous System ...	2,063	2·10	2,749	2·80	1,992	2·03
„ „ Respiratory System.	11,231	11·46	23,487	23·97	8,845	9·03
Diarrhœa	1,610	1·64	1,796	1·83	2,016	2·05
Dysentery	981	·98	1,001	1·02	1,004	1·02
Accidents	674	·68	643	·65	689	·70
All other Causes (except Still-born).	10,270	10·48	17,598	17·96	9,713	9·92
Total ...	33,390	34·09	58,388	59·61	33,330	34·04

In considering the incidence of the principal causes of death in relation to the total mortality of the City, the diseases of the Respiratory System will, as usual, appear to have exacted the heaviest toll, namely, 23,487 deaths, being 40·22 per cent. of the total mortality, against 33·6 per cent. in 1917 ; while Fevers occasioned the next lower number of deaths : 4,553 or 7 per cent. of the total against 7·3 per cent. in the preceding year. The incidence of Plague was milder than that of either of the foregoing causes, as the disease contributed 1,143 deaths or 1·95 per cent. of the total. It will thus be seen that the shrinkage of Plague as a cause of death has been progressive year after year. The mortality attributed to it in 1917 was 743 less than that from Fevers and 9,525 less than that from Respiratory Diseases, while in the year under review it was 3,410 less than that from Fevers and 22,344 less than that from the Diseases of the Respiratory System. Cholera was not epidemic in 1917 as it was in the early and again in the latter part of 1918, and 1,662 deaths were due to this cause in 1918 against 61 in the preceding year. It was epidemic for a week in January ending the 12th and in December from the week ending the 14th. Small-pox was prevalent during the first seven months of the year and as an epidemic for fourteen weeks from the week ending the 9th February to that ending the 11th May and caused during the year 1,024 deaths as against 269 in 1917. Measles recorded 486 deaths against 221 in 1917 and Phthisis 1,591 deaths being 143 more than in the preceding year.

Compared with the averages of the preceding decennium, an appreciable reduction in the mortality will be noticed under Plague, the death-rate from which stood at 1·16 against the decennial mean rate of 3·04 ; Diarrhœa 1·83 against 2·05 ; there was a rise under almost every other cause, the largest being under Respiratory Diseases the death-rate from which in 1918 was 23·97 against the decennial mean of 9·03 ; while the total death-rate was 59·61 against 34·04.

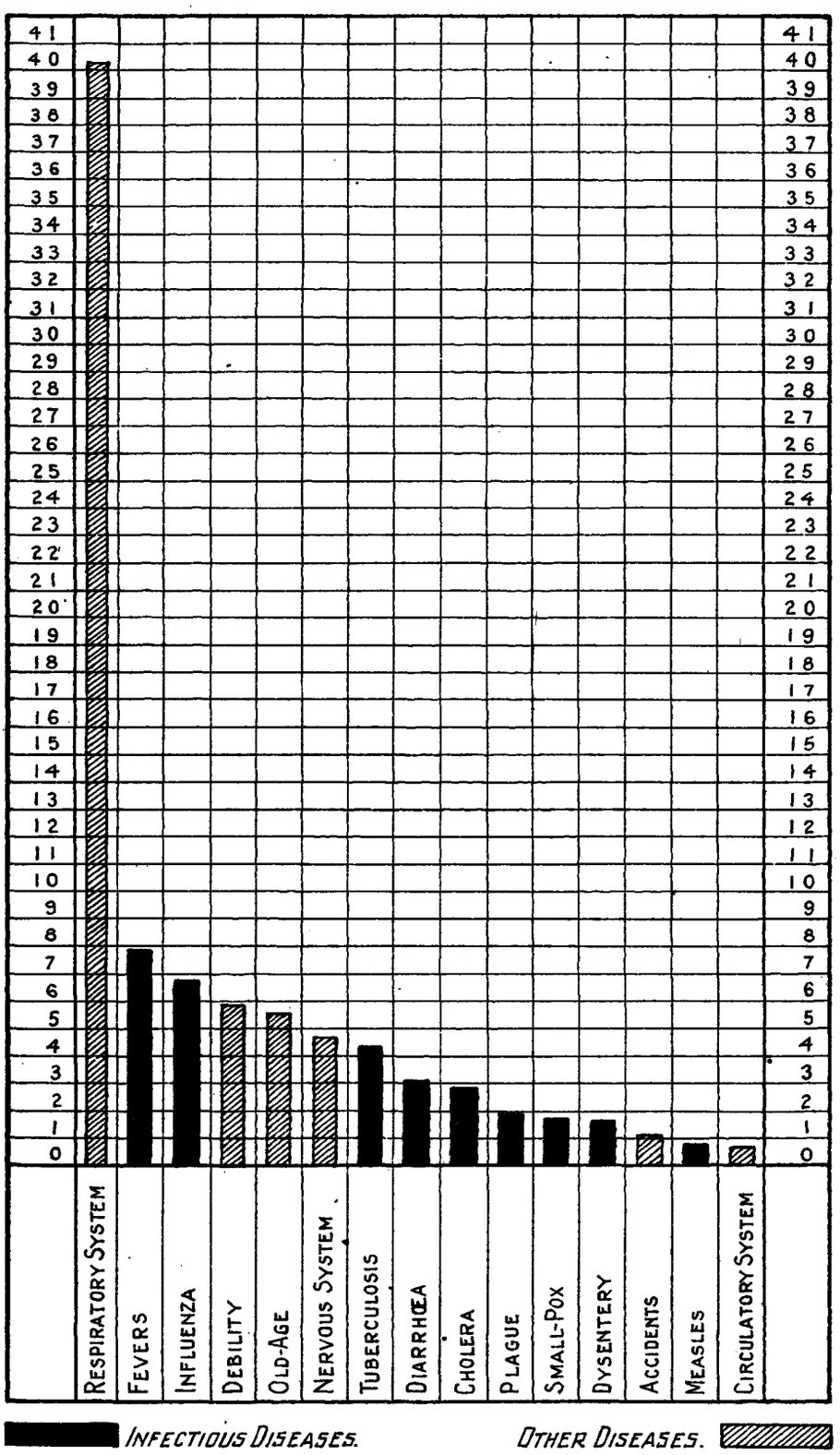
Mortality from Zymotic Diseases.

The death-rate from Zymotic Diseases, which declined during 1905 to 1910 from 27·39 to 9·89 and from 7·47 in 1913 to 4·08 in 1915, rose to 6·08 in 1917 and to 14·47 in the year under notice ; the average of the preceding three years was 5·65 and the decennial mean 8·58.

Compared with the triennial averages, reduced mortality is noticeable under Plague (—287), Enteric Fever (—24) and Malarial Fever (—36).

DIAGRAM

PERCENTAGE OF DEATHS FROM PRINCIPAL CAUSES TO THE TOTAL MORTALITY IN BOMBAY IN 1918.



SHRI KARUNESH P. PRESS, BOMBAY.

Compared with the decennial averages, decreases are noticeable under Plague (—1,834), Enteric Fever (—15), Malarial Fever (—79) and Relapsing Fever (— 31) There was an increase of 3,961 under Influenza.

TABLE OF MORTALITY FROM ZYMOTIC DISEASES.

Cause of Death.	1917.	1918.	Average of the last three years (1915-1917).	Average of the last ten years (1908-1917).
Small-pox	269	**1,024**	549	604
Measles	221	**486**	211	289
Plague	1,706	**1,143**	1,430	2,977
Scarlet Fever	.....	.....	...	...
Enteric Fever	170	**125**	149	140
Malarial Fever	262	**200**	236	279
Ague and Remittent Fever	2,012	**4,219**	1,839	2,404
Relapsing Fever	5	**9**	2	40
Influenza	5	**3,964**	4	2
Whooping Cough	14	**11**	11	11
Diphtheria	5	**6**	5	3
Cholera	61	**1,662**	72	340
Dysentery	981	**1,001**	802	1,004
Puerperal Septicæmia	252	**324**	233	314
Total ...	5,963	**14,174**	5,543	8,407
Death-rate per 1,000 of population ...	6·08	**14·47**	5·65	8·58

Mortality by Races.

The relative incidence of mortality among the different races inhabiting the City may be considered with the aid of the following table, which shows that every community recorded an augmented death-rate compared with the preceding year.

TABLE SHOWING BY CASTE THE NUMBER OF DEATHS AND THE DEATH-RATES FROM ALL CAUSES IN 1917 AND 1918 AND THE AVERAGE OF THE PRECEDING 10 YEARS (1908-1917).

Race or Caste.	1917.		1918.		Average of last ten years (1908-1917)	
	Number of Deaths.	Rate of Mortality per 1,000 of Population.	Number of Deaths.	Rate of Mortality per 1,000 of Population.	Number of Deaths.	Rate of Mortality per 1,000 of Population.
Hindus. Jains	1,419	69·35	2,435	119·01	...	...
Hindus. Brahmins	1,373	25·58	2,323	43·29	...	...
Hindus. Lingaits	196	168·24	375	318·06	...	...
Hindus. Bhatias	234	30·07	324	41·64	...	...
Hindus. Hindus of other Castes	16,322	29·82	29,142	53·25	...	...
Hindus. Hindus, Low Caste	4,948	74·63	8,284	152·74	...	...
Hindus, all Castes	23,592	34·46	42,883	62·64	22,509	32·57
Mussalmans, (including Negro-Africans)	6,871	38·31	10,973	61·18	7,695	43·68
Parsees	1,009	19·81	1,401	27·50	1,166	23·18
Jews	159	24·10	265	40·16	182	29·17
Indian Christians	1,314	31·83	2,215	53·66	1,380	36·35
Eurasians	108	25·78	176	42·02	116	28·25
Europeans	260	21·85	346	29·09	245	19·38
Buddhists	43	74·39	74	128·02	14	28·57
Other and unknown Castes	34	250·00	55	404·41	23	234·69
Total	33,390	34·09	58,388	59·61	33,330	34·04

Tnese figures, however, form no reliable guide to the real conditions as they are based on a population far below the actual numbers ; again the presence of famine and war conditions, epidemics of Cholera, Influenza and Small-pox render any attempt at comparison of the health conditions of the City with other years entirely erroneous.

The general death-rate of the City was 59·61 as compared with 34·09 in 1917. The communities that returned a higher death-rate were Buddhists (128·02), who however are numerically 576 an inconsiderable portion of the population ; Hindus as a whole registered the death-rate of 62·64. Among Hindus, Lingaits, who number only 1,779 by the Census of 1911, returned the highest death-rate (318·06) ; next, Hindus, low caste, (152·74) ; then Jains (119·01) ; the lowest rate was registered by Bhatias, namely 41·64.

Mussalmans recorded the highest communal death-rate next to Buddhists and Hindus, namely 61·18 against 38·31 in 1917. Parsees registered the lowest death-rate (27·50). Europeans recorded the next higher rate of 29·09 against 21·85 in 1917 ; then follow in ascending order of incidence ; Jews with the death-rate of 40·16 (against 24·10 in 1917), Eurasians with 42·02 against 25·78 in 1917 and Indian Christians with 53·66 against 31·83 in 1917.

Compared with the mean death-rate for the preceding decennium (1908—1917), the death rate during the year under report shows an increase of 25·57.

Comparative incidence of Principal Diseases in different communities. Death-rates per 1,000 of population in the caste or race.

Considering the comparative incidence of principal diseases in the different communities, it will be noticed that the incidence of Small-pox was highest in the small community of Lingaits and among Indian Christians who each recorded the communal death-rate of 3·39; the great susceptibility of the latter to Small-pox is due to their not being vaccinated in infancy with the result that they are generally the worst sufferers in every out-break of the disease. The ratio of mortality from Measles (2·34) and Plague (7·28) was the highest among Jains. The death-rate from Fevers was the highest among Lingaits (32·23), and next among Buddhists (10·38); from Enteric Fever among Buddhists (5·19) and next among Europeans (1·84). The death-rate from Malaria was the highest among Eurasians (.95), next among Europeans (.42); least among Hindus (.16). Influenza was most fatal to Lingaits (20·35), next to Buddhists (17·20), Hindus, low caste (12·05) and Indian Christians (5·01). Cholera was most fatal to Hindus, low caste (3·48); then in the descending order of incidence follow Lingaits (3·39) and Hindus of other castes (2·31). The ratio of mortality from Dysentery was highest among Lingaits (7·63); then follow Hindu, low caste (2·76), and Europeans (1·26). Phthisis was most fatal to Buddhists (20·76); and among Hindus, to Lingaits (11·02). The death-rate from the disease among Eurasians was 3·82, among Hindus low caste 3·81 and Mussalmans 3·66. From Respiratory Diseases the highest death-rate was registered among Lingaits (146·73) ; next among Hindus all castes (66·91) and Buddhists (27·68).

For greater detail reference is invited to table 30 appended to this Report.

Mortality by months.

The following table indicates the monthly variations in mortality compared with 1917. It will be seen that month for month a higher mortality was recorded in 1918 with the exception of August, when it was less by 69, and the total increase at the end of the year amounted to 24,998.

The causes of this large increase are to be sought in the epidemic prevalence of various diseases throughout the year—Cholera was epidemic in the week ending 12th January and continued in a sporadic form till the end of February. Small-pox prevailed as an epidemic from the week ending 9th February to that ending 11th May and registered 1,024 deaths in 1918 against 269 in 1917. Plague was epidemic from the week ending 30th March to that ending 25th May and caused 1,143 deaths, that is 563 less than in 1917.

Then followed two out-breaks of Influenza. The first was in June and July ; it attracted notice about the 21st June and with an incubation period of 12 to 24 hours rapidly assumed epidemic proportions. The second out-break was a pandemic from the 10th of September and continued until the 10th of November. 3,963 deaths were registered as due to it in 1918 as against 5 in 1917.

Cholera again appeared as an epidemic in the year—from the week ending 14th December and continued so till the end of February 1919. The mortality due to this cause during the year was 1,661 against 61 in 1917.

DIAGRAM

SHEWING

Monthly Total Mortality ——●——

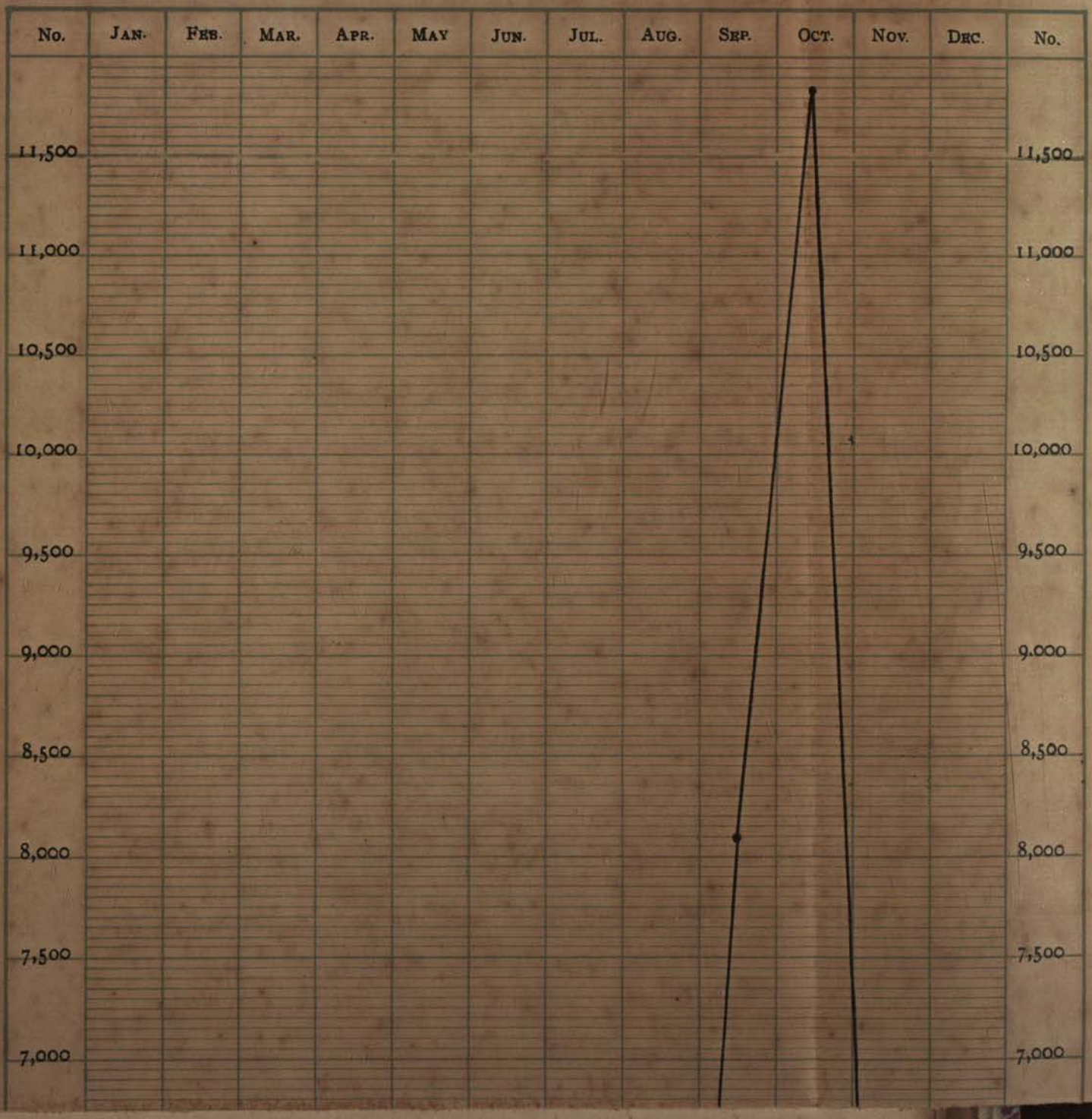
Deaths from Small-pox ▬▬ | ▬▬ Deaths from Plague.

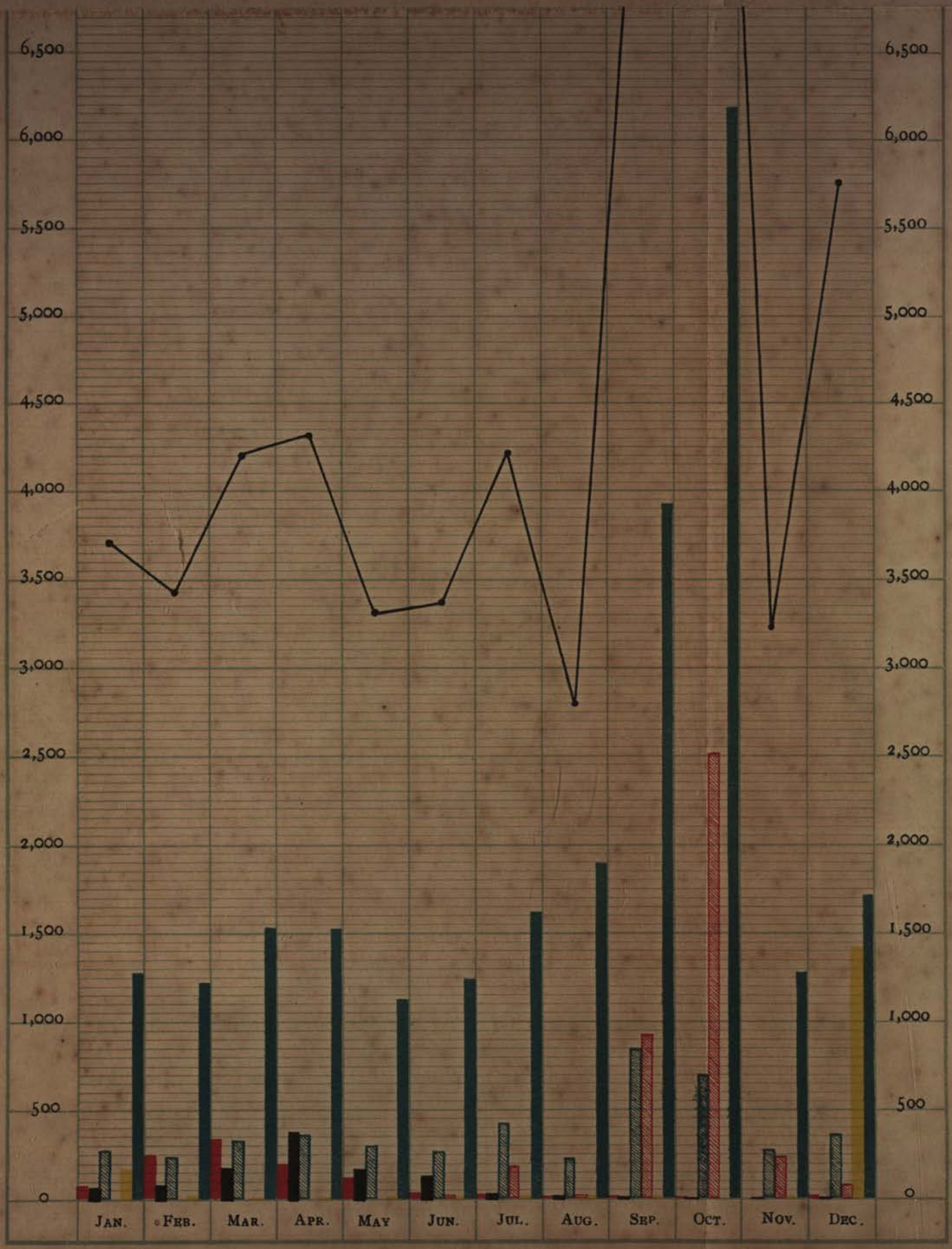
" " Fevers ▒▒▒ | ▬▬ " " Influenza.

" " Cholera ▬▬ | ▬▬ " Respiratory Causes.

in Bombay City during

1918.





SHRI KARUNESH P. PRESS, BOMBAY.

It will be observed that September (8,110), October (11,850), and December (5,786, registered heavier mortality than other months; October registered the highest. Compared with 1917 the increases for these months are 5,257, 9,226 and 2,939 respectively. March, April and May are among the least healthy months of the year, when Plague, Small-pox, Measles and Respiratory Diseases are at their worst.

The highest number of deaths from Small-pox were recorded in March (339), February (243) and April (197). Measles caused 132 deaths in March, 99 in April and 72 in May; so also Plague (185, 385, 178). Influenza caused the highest number of deaths in October (2,507); so also Diseases of the Respiratory System (6,189).

TABLE OF DEATHS (EXCLUSIVE OF STILL-BIRTHS) FROM ALL CAUSES BY MONTHS IN 1917 AND 1918.

MONTHS.	Number of Deaths in 1917.	Number of Deaths in 1918.
January	2,550	3,719
February	2,438	3,440
March	3,283	4,207
April	3,079	4,323
May	3,021	3,319
June	2,476	3,370
July	2,843	4,222
August	2,869	2,800
September	2,853	8,110
October	2,624	11,850
November	2,507	3,242
December	2,847	5,786
TOTAL	33,390	58,388

Mortality by Sections.

The general death-rate for the whole City was 59·61 against 34·09 in 1917. All the sections of the City recorded higher death-rates compared with 1917. The following sections recorded rates lower than the general death-rate:—Middle and Lower Colaba (42·48) and Esplanade (57·99) in A Ward, Mandvi (57·58), Chukla (51·09) and Dongri (48·37) in B; Market (45·20), Dhobi Talao (54·54), Fanaswadi (59·04), Bhuleshwar (51·94), and Khara Talao (56·96) in C Ward; all the sections of D Ward; Tardeo (57·53) and First Nagpada (45·21) in E Ward.

It is necessary to mention here that the high death-rates of certain sections are only apparently so; Upper Colaba (118·81) and Fort Southern (90·12) registered by far the highest sectional death-rates. Of these, the former reveals a large decrease in population as enumerated in 1911 (from 3,775 in 1906 to 1,557), owing chiefly to the exclusion of the Military included in previous enumerations (1901 and 1906). It contains also the Colaba Station (Military) Hospital for the reception of the sick returning from the seats of War. Fort Southern is mostly a business locality and not residential. Esplanade (57·99), Tarwadi (90·71), Byculla (73·32), these sections contain Hospitals and should exhibit a much lower rate, but for the fact that, for want of residential addresses of several patients dying in the institutions, the deaths have to be referred to the sections containing the Hospitals instead of

to those from whence the deceased came. Fort Southern contains the Lady Hardinge War Hospital ; Esplanade contains the St. George's, Cama and Allbless, Goculdas Tejpal, Parsi Lying-in and the Gerard Freeman-Thomas War Hospitals; also the Marine Lines War Hospital. Sir Jamsetjee Jeejeebhoy, Bai Motlabai and Sir D. M. Petit and Maratha Hospitals are in Tarwadi : and St. Joseph Foundling Home, Arthur Road Infectious Diseases Hospital and Adams Wylie Memorial Hospital are in Byculla, the Labour Corps War Hospital in Sion and the Enteric Fever Depôt in Parel. The lowest death-rate (43·87) was returned for Chowpati.

Compared with the averages of the preceding quinquennium (1913-1917), all the sections exhibit a higher death-rate.

Table 3 appended to this report explains the relative incidence of diseases in the different sections of the City.

TABLE SHOWING THE DEATH-RATE FROM ALL CAUSES IN 1917 AND 1918 AND THE MEAN OF THE PRECEDING FIVE YEARS (1913-1917).

Ward.	Sections.	1917.	1918.	Mean death-rate (1913-1917).
A	Upper Colaba	80·28	118·81	57·16
	Middle and Lower Colaba	27·54	42·48	26·17
	Fort, Southern	67·59	90·12	44·19
	Fort, Northern	26·88	61·59	32·59
	Esplanade	37·38	57·99	34·23
B	Mandvi	31·41	57·58	30·57
	Chukla	32·93	51·09	33·38
	Umarkhadi	42·05	71·17	39·90
	Dongri	24·55	48·37	26·35
C	Market	25·95	45·20	23·26
	Dhobi Talao	30·29	54·54	28·64
	Fanaswadi	30·98	59·04	26·74
	Bhuleshwar	31·73	51·94	31·67
	Khara Talao	39·99	56·96	36·90
	Kumbharwada	36·13	63·35	32·99
D	Khetwadi	29·62	81·82	27·80
	Girgaum	32·39	57·92	28·49
	Chowpati	28·86	43·87	24·65
	Walkeshwar	30·35	49·34	24·34
	Mahalakshmi	28·74	54·78	26·34
E	Mazagon	37·04	72·68	34·38
	Tarwadi	50·06	90·71	47·84
	Second Nagpada	42·81	70·87	40·27
	Kamathipura	42·41	70·93	38·72
	Tardeo	33·72	57·53	32·92
	Byculla	41·20	73·32	36·36
	First Nagpada	27·90	45·21	27·59
F	Parel	34·65	60·43	29·24
	Sewri	36·86	63·98	29·99
	Sion	40·35	82·17	32·20
G	Mahim	41·61	66·05	34·33
	Worli	34·18	63·88	29·98
	Harbour, Docks, Railways and Homeless	2·91	5·11	2·91
	Total	34·09	59·61	30·89

Mortality by Place of Birth.

Of the total number of 58,388 deaths in the entire population during the year, 32·4 per cent. or 18,941 deaths occurred among persons born in Bombay against 38·58 per cent. in 1917; 62·9 per cent. or 36,739 deaths among those born outside it against 57·24 in 1917 ; and 4·6 or 2,708 deaths were of persons whose place of birth could not be ascertained ; the corresponding ratio in 1917 was 4·16.

Plague.

Plague appeared in the City in the latter half of 1896 ; the year under review is thus the 23rd year of its continuous presence with us. During the period, the mortality from the disease rose to the appalling figure of 20,788 in 1903, and gradually dropped during

succeeding years to 1,717 in 1912. Starting from 1897, it will be observed that Plague mortality has been marked by a persistent ebb and rise during alternate years until 1906 is reached; with the exception, however, of 1900, when the rise warranted by the course of the mortality in previous years did not occur.

The year 1906 ushered in a quinquennium of uninterrupted decline, until 3,656 deaths were registered in 1910; this was the lowest figure in the history of the disease until 1915 when the mortality from this cause fell to 599.

The Plague mortality in 1916 rose to 1,987 but declined to 1,706 in the following year. The year under review registered 1,143 deaths from the disease showing a decrease of 563 deaths below the figure for 1917 (1,706). This is the lowest mortality in a year from the disease since its appearance in 1896, with the exception of 1915 when it was 599.

The number of Plague attacks during the year was 1,380 against 1,987 in 1917 and 2,321 in 1916. The case-mortality works out to 82·82 per cent. against 85·85 per cent. in 1917 but it is the lowest percentage since 1900 (74·16); the other years which were marked by a lower percentage of case-mortality being 1897 (82·64), 1898 (82·17), 1899 (81·20) and 1900 (74·16).

TABLE SHOWING THE NUMBER OF ATTACKS AND DEATHS FROM PLAGUE SINCE 1896 AND THE TOTAL MORTALITY, EXCLUDING STILL-BORN, SINCE 1891.

Years.	Number of Plague Attacks.	Number of Plague Deaths.	Death-rate from Plague per 1,000 of Population.	Percentage of Deaths to Attacks.	Number of Deaths from all Causes (exclusive of Still-born).	Total Death-rate per 1,000 of Population.
1891	...	...	...	...	23,847	29·01
1892	...	...	...	...	26,518	32·26
1893	...	...	...	...	23,142	28·16
1894	...	...	...	...	27,330	33·25
1895	...	...	...	...	25,081	30·52
1896	2,544	1,936	2·36	76·10	33,451	40·71
1897	13,314	11,003	13·39	82·64	47,896	58·28
1898	22,130	18,185	22·12	82·17	51,961	63·23
1899	19,451	15,796	19·22	81·20	56,434	68·07
1900	17,913	13,285	16·16	74·16	79,350	96·55
1901	21,006	18,736	24·14	89·19	59,495	76·66
1902	16,423	13,820	17·80	84·15	48,414	62·38
1903	23,344	20,788	26·78	89·05	50,513	65·09
1904	15,488	13,538	17·44	87·40	42,676	54·99
1905	16,308	14,198	18·29	87·06	47,762	61·54
1906	12,323	10,823	11·06	87·82	52,874	54·07
1907	7,353	6,389	6·53	86·88	38,687	39·56
1908	6,134	5,361	5·48	87·39	38,271	39·13
1909	5,864	5,197	5·31	88·62	34,878	35·66
1910	4,130	3,656	3·73	88·52	34,933	35·72
1911	4,503	4,006	4·09	88·96	34,961	35·69
1912	1,936	1,717	1·75	88·68	38,954	39·77
1913	3,023	2,609	2·66	86·30	31,806	32·47
1914	3,348	2,941	3·00	87·84	31,853	32·52
1915	694	599	·61	86·31	23,681	24·17
1916	2,321	1,987	2·02	85·60	30,574	31·21
1917	1,987	1,706	1·74	85·85	33,390	34·09
1918	1,380	1,143	1·16	82·82	58,388	59·61

Plague by months

The monthly variations of Plague mortality are indicated in the following table. Compared with 1917, all the months of the year except January (+ 24), April (+ 25) and June (+ 3) registered a lower mortality from the disease, the total decrease for 1918 being 563. Plague was epidemic from the week ending 30th March to that ending 25th May and caused the highest number of deaths in April (385), the week ending 20th of the month registering the maximum of weekly deaths, namely, 106. It declined in the subsequent months and the minimum number of seizures and deaths from the disease (4) was reached in November. The monthly minimum in 1917 was 51 attacks and 43 deaths

STATEMENT SHOWING PLAGUE DEATHS BY MONTHS DURING 1918.

MONTHS.	Plague Deaths in		Plague Attacks in	
	1917.	1918.	1917.	1918.
January	47	71	53	93
February	97	87	116	104
March	269	185	302	228
April	359	385	417	452
May	306	179	359	220
June	141	144	157	169
July	137	43	169	53
August	114	19	134	25
September	72	15	86	20
October	71	5	81	6
November	50	4	62	4
December	43	6	51	6
Total ...	1,706	1,143	1,987	1,380

Plague by Races.

Of the 1,143 deaths from Plague during the year under report, 913 occurred among Hindus of all classes against 1,344 in 1917; while 140 against 244 in the preceding year were registered amongst Mussalmans including Negro-Africans. Indian Christians contributed 50 and Parsees 31 against 69 and 41 respectively in 1917. The small balance of 9 sums up the deaths amongst Eurasians (3), Jews (2) and Europeans (4) against 5 amongst Jews and 3 amongst Europeans in the preceding year. Buddhists registered no death from the disease as in 1917.

As in previous years, Plague was most fatal to Hindus who returned the death-rate of 1·33 next to Indian Christians with the ratio of 1·21; then to Mussalmans (·78), Eurasians (·71), Parsees (·60) and Europeans (·33). The lowest death-rate was returned by Jews (·30).

Plague by Sex and Age.

The sex distribution of Plague mortality in the year was 835 males and 308 females, the ratio per 1,000 of sex population being males 1·30 and females ·90 against 1·91 and 1·40 in 1917. The proportion of male deaths to female was 2·7 to 1 in the entire population; among Hindus of all castes 2·8 to 1; 4·1 to 1 among Mussalmans (including Negro-Africans); ·8 to 1 among Parsees, 1·0 to 1 among Jews, 1·3 to 1 among Indian Christians but it was ·3 to 1 among Europeans, and ·5 to 1 among Eurasians.

Examining the Plague mortality under the different age-groups, it is observed that the disease was most fatal to persons between 10 to 30 years of age, as 765 deaths or more than 66 per cent. of the mortality occurred among them; of these 580 were among males and 185 among females.

Among infants or children under 1 year of age, there were only 2 deaths from this cause; while in the population aged 35 to 50 and more, 199 males and 78 females died from the disease.

Plague by Sections.

The general death-rate from Plague for the whole City was 1·16 in the year under review, being ·58 lower than that in 1917 (1·74). Among sections with a higher incidence of the disease may be mentioned Upper Colaba (1·92), Middle and Lower Colaba (4·11), Fort South (1·73) and Fort North (3·54) in A Ward; Mandvi (2·19) and Chukla (1·56) in B Ward; Market (1·98), Bhuleshwar (1·42), Khara Talao (1·44), Kumbharwada (2·02) in C Ward; Chowpati (1·14) in D Ward; Tarwadi (1·19) in E Ward.

All the other sections registered a lower rate. The lowest rate (·15) was returned for First Nagpada, whereas the highest (4·11) was recorded in Middle and Lower Colaba. Compared with the mean rate of the preceding quinquennium (1913-1917), the death-rate from Plague was less by ·84 in the year under report.

Compared with the quinquennial mean, the following sections recorded a higher death-rate from the disease: Middle and Lower Colaba and Fort North; Mandvi and Kumbharwada.

TABLE SHOWING THE DEATH-RATE FROM PLAGUE IN SEVERAL SECTIONS IN 1917 AND 1918 WITH THEIR QUINQUENNIAL AVERAGES (1913-1917).

Ward.	Sections.	1917.	1918.	Quinquennial average (1913-1917).
A	Upper Colaba	5·78	1·92	2·56
	Middle and Lower Colaba	6·25	4·11	5·33
	Fort, Southern	4·04	1·73	2·02
	Fort, Northern	2·44	3·54	2·36
	Esplanade	1·35	1·06	1·06
B	Mandvi	2·86	2·19	3·16
	Chukla	1·77	1·56	1·98
	Umarkhadi	1·90	·94	2·07
	Dongri	1·43	·51	1·90
C	Market	1·82	1·98	1·92
	Dhobi Talao	1·11	1·13	1·62
	Fanaswadi	1·16	1·05	1·71
	Bhuleshwar	1·53	1·42	1·91
	Khara Talao	1·52	1·44	1·74
	Kumbharwada	1·01	2·02	1·98
D	Khetwadi	1·47	·68	1·15
	Girgaum	1·46	·94	1·07
	Chowpati	1·22	1·14	·87
	Walkeshwar	4·32	·65	1·97
	Mahalakshmi	1·71	1·14	2·58
E	Mazagon	1·52	1·06	2·56
	Tarwadi	2·21	1·19	2·32
	Second Nagpada	·73	·27	1·05
	Kamathipura	2·42	1·06	1·74
	Tardeo	2·26	1·15	1·65
	Byculla	1·49	·88	1·88
	First Nagpada	·77	·15	·93
F	Parel	1·40	·81	2·72
	Sewri	1·94	·47	2·77
	Sion	1·95	1·14	2·44
G	Mahim	3·93	·98	3·01
	Worli	1·21	·98	2·48
	Harbour, Docks, Railways and Homeless	·06	·02	·06
	Total	1·74	1·16	2·00

Plague Measures.

The usual preventive and precautionary measures against Plague were continued during the year under report: Inoculation, Rat Destruction, Evacuation and Disinfection.

(*i*) Inoculation:—

The number of inoculations performed during 1918 was 4,599 against 4,070 in 1917 and 4,931 in 1916. Of these 229 inoculations were performed by the District Registrars against 693 in 1917.

STATEMENT SHOWING THE NUMBER OF PERSONS INOCULATED DURING THE YEAR ENDING 31ST DECEMBER 1918.

District No.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
District No. 1 ...	3	...	41	83	2	...	...	...	...	...	...	...	129
" " 2 ...	1	13	5	2	...	...	...	...	...	...	...	...	21
" " 3 ...	1	1	...	...	...	...	...	...	...	...	...	...	2
" " 4 ...	...	...	...	2	3	...	...	...	...	...	...	...	5
" " 5 ...	...	...	2	...	2	...	...	...	...	...	...	...	4
" " 6 ...	11	...	...	...	5	15	...	...	...	...	...	...	31
" " 7 ...	4	1	...	7	...	...	...	...	...	...	...	...	12
" " 8 ...	3	2	1	5	7	1	1	...	...	...	...	...	20
" " 9 ...	...	...	...	...	...	...	...	...	...	...	...	...	...
" " 10 ...	...	...	...	5	...	...	...	...	...	...	...	...	5
Bombay Bacteriological Laboratory.	82	133	181	169	60	46	1	6	2	1	2	4	687
H. M.'s Common Prison	269	500	197	192	207	259	344	353	413	378	260	311	3,683
Total ...	374	650	427	465	286	321	346	359	415	379	262	315	4,599

(*ii*) Rat Destruction :—

Rat raids gave slightly lower results than in 1917; as 8,78,316 rats were collected and destroyed during 1918, compared with 9,95,739 in 1917, being a decrease of 1,17,423.

From the following statement it will be seen that of the 8,78,316 rats collected and sent to the Parel Laboratory, 4,50,587 were examined and 10,034 were found infected; the percentage of infected rats to the number examined being 2·22 as in the preceding year against 2·54 in 1916.

STATEMENT SHOWING THE TOTAL NUMBER OF RATS SENT TO THE PAREL LABORATORY, THE NUMBER EXAMINED AND THE NUMBER FOUND INFECTED IN 1918.

Months.	Number of rats sent to the Parel Laboratory.	Number of rats examined.	Number of rats found infected.	Ratio.
January ...	90,510	49,841	886	1·77
February ...	82,959	45,051	1,579	3·5
March ...	77,274	37,648	1,736	4·61
April ...	76,937	43,388	2,629	6·05
May ...	62,559	37,312	1,516	4·06
June ...	47,016	23,977	692	2·88
July ...	59,778	29,326	424	1·44
August ...	76,121	38,270	200	0·52
September ...	68,431	32,843	136	0·41
October ...	70,490	35,475	99	0·27
November ...	74,994	34,516	54	0·15
December ...	91,245	42,940	83	0·19
Total ...	8,78,316	4,50,587	10,034	2·22

The percentage of infected rats rose steadily from 1·77 in January to 6·05 in April, then declined gradually to ·15 in November; it was 0·19 in December.

Rat Plague and Human Plague.

In the attached diagram the relation between rat Plague and human Plague is illustrated; the rise in human Plague will be seen to have followed on the rise of infection among rats; the fall in the percentage of infected rats will be found to have been followed by a corresponding fall in the incidence of Plague.

(*iii*) Evacuation :—

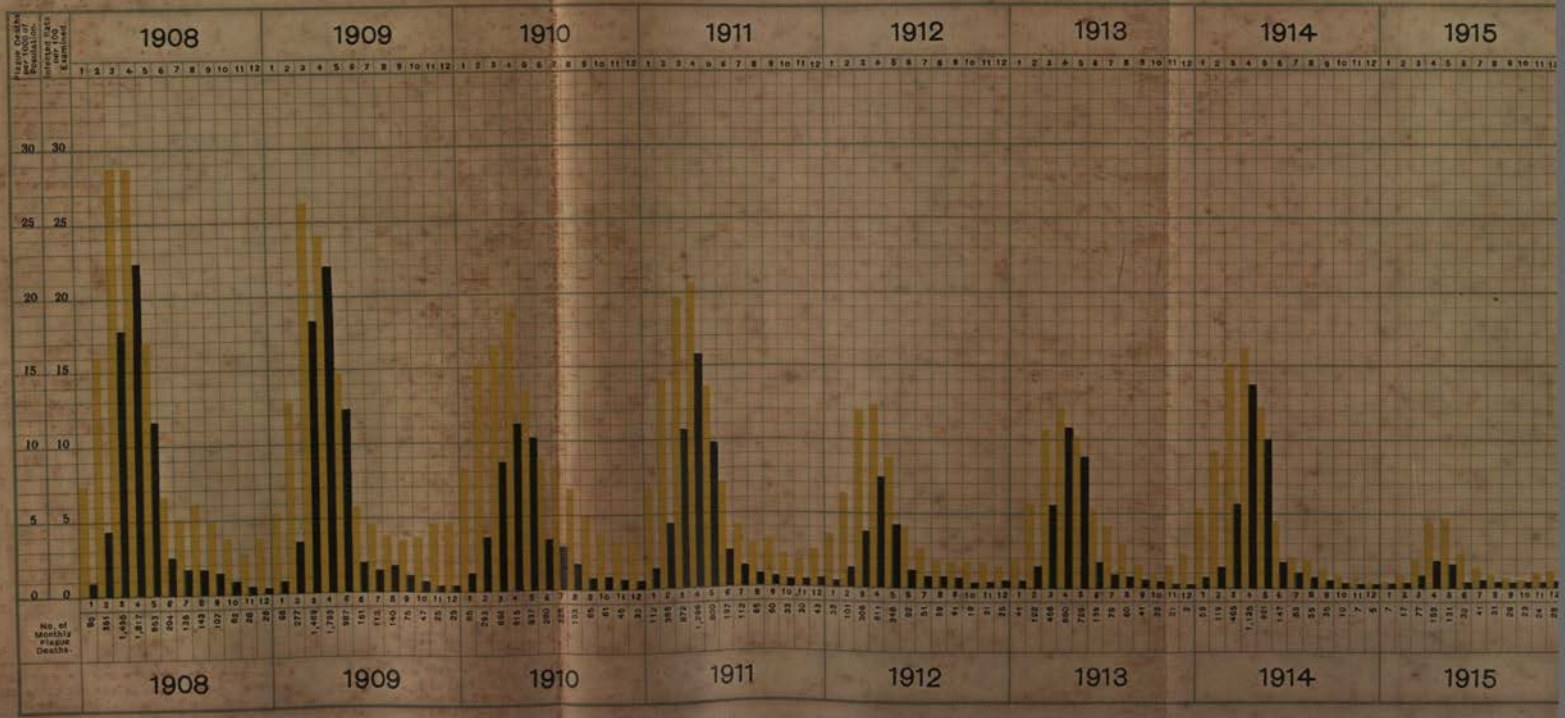
To induce evacuation of congested and infected areas, Municipal Health Camps, as in previous years, were put up at Agripada, Nowroji Hill, Gilder Tank, Mahim Gardens and near Mahim Railway Station, Colaba (1st Koli Lane), Chinchpoogli and Arthur Road.

To provide against possible emergencies, semi-permanent Health Camps at Koli Lane (Colaba), Suklaji Street, Tardeo, Arthur Road, Chinchpoogli (at the junction of DeLisle Road and Arthur Road) and Mahim Station were maintained in a state of repair during monsoon months. Besides these there were private Health Camps put up by the public on Mahim foreshore and at Matunga in the open fields.

DIAGRAM

RELATION OF RAT PLAGUE TO HUMAN F

1908 TO 1918 BY MONTHS

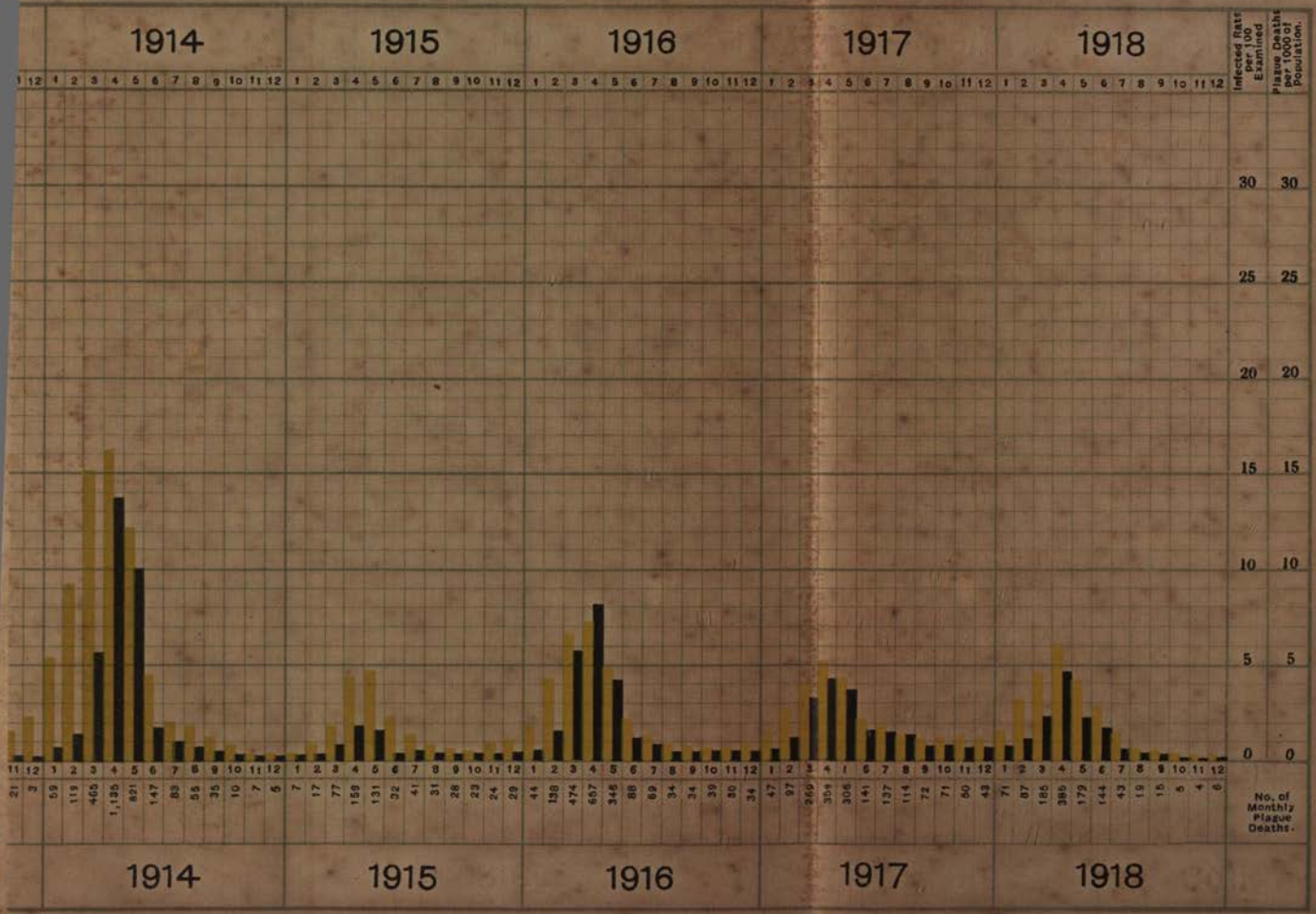


Plague Infection among Rats.

AM

TO HUMAN PLAGUE

BY MONTHS



As in previous years every place where a rat was found or a Plague case or a case of any other infectious disease occurred was pesterined and all the gullies and passages were similarly treated.

On account of	Cases removed to Hospitals.	Houses vacated.	Houses disinfected.	Articles sterilized.
Precautionary Measures	.....	167	3,298	619
Dead Rats	.....	11	392	...
Plague	197	80	1,544	1,063
Suspicious Plague	6	4	16	...
Small-pox	1,124	31	2,287	2,734
Measles	17	...	503	313
Chicken-pox	42	...	107	43
Typhoid Fever	12	...	160	552
Malarial „	5	...	26	...
Remittent „	2	...	18	12
Relapsing „	.....	...	2	1
Influenza	.....	...	1,595	325
Cholera	344	62	1,947	2,285
Erysipelas	1	...	19	...
Leprosy	.....	...	10	...
Diarrhœa	16	...	71	54
Tubercle of Lungs	61	...	1,538	690
Other Tubercular Diseases	6	...	288	46
Pneumonia	376	...	653	173
Other Causes	316	1	223	57
Total ...	2,525	356	14,697	8,972

Disinfectants used during the year, their quantities and cost.

Statement showing (*a*) the quantities in which each kind of disinfectant was used during the year ending 31st December 1918 and their cost ; (*b*) quantities used (*i*) for disinfecting infected dwelling houses and rooms, and (*ii*) for disinfecting other places such as house-gullies, drains, privies, &c. ; and (*c*) the total annual cost of disinfectants used for each of the purposes (as required under Corporation Resolution No. 8225 of 22nd March 1917).

Name of Disinfectant.	(*a*)		(*b*)		(*c*)	
			Quantities of Disinfectants used		Total Cost of Disinfectants used	
			(*i*)	(*ii*)	(*i*)	(*ii*)
	Quantities of Disinfectants used.	Cost.	For disinfecting infected dwelling houses and rooms.	For disinfecting other places such as house-gullies, drains, privies, &c.	For disinfecting infected dwelling houses and rooms.	For disinfecting other places such as house-gullies, drains, privies, &c.
		Rs. a. p.			Rs. a. p.	Rs. a. p.
Pesterine .. .. Drums	9,760 3/10	9,260 7 2	1,639 1/10	8,121 1/5	1,033 12 11	8,226 10 3
Zondo Fluid .. .. Gallons	876½	3,285 2 2	407½	469	1,647 10 11	1,637 7 3
Acid Hydrochloride and Muriatic Acid .. Jars	3	60 0 0	....	3	....	60 0 0
Izal Fluid .. .. Gallons	1,763¾	5,290 13 3	63¾	1,700	297 1 3	4,993 12 0
Doughla's fluid .. .. „	28	82 4 0	18	10	52 14 0	29 6 0
Izal Powder .. .. Bags.	824	7,734 14 0	....	824	....	7,734 14 0
Bleaching Powder .. .. Lbs.	3,008½	959 7 3	768½	2,240	259 7 3	700 0 0
Lime .. .. Maunds.	344¾	339 9 1	344¾	....	339 9 1	....
Sulphur .. .. Lbs.	786½	139 8 5	177½	609	29 6 5	110 2 0
Dammer .. .. „	2,248	177 5 4	....	2,248	....	177 5 4
Total ..	....	27,329 6 8	....	....	3,659 13 10	23,669 8 10

Small-pox.

Small-pox was prevalent throughout the year and became epidemic in the week ending 9th February and continued so to that ending 11th May. It caused in the year 1,024 deaths against 269 in 1917 and 1,021 in 1916, and 423 the average of the preceding five years. 2,297 Small-pox attacks including 135 imported cases were registered during the year against 664 (including 55 imported cases) in 1917.

Small-pox by months.

The following table shows the number of Small-pox attacks and deaths during each month of the year. It will be observed that the disease was at its height in March registering 696 cases and 339 deaths; thereafter it steadily declined during the subsequent months exhibiting a slight upward trend in December :—

NUMBER OF SMALL-POX ATTACKS AND DEATHS BY MONTHS DURING 1917 AND 1918.

MONTHS.	1917.		1918.	
	Attacks.	Deaths.	Attacks.	Deaths.
January	31	9	194	61
February	48	14	589	243
March	109	49	696	339
April	110	57	441	197
May	117	37	223	110
June	100	44	68	44
July	52	22	40	18
August	15	9	8	3
September	15	10	5	2
October	12	6	4	1
November	13	3	7	...
December	42	9	22	6
Total	664	269	2,297	1,024

The year opened with 3 indigenous cases on the New Year's day and of the 199 cases in January 12 were imported ; 6 from the Harbour, 2 from Marwar, 1 each from Ratnagiri, Goa, the Persian Gulf and Kathiawar.

February registered 589 cases including 29 imported: 10 from the Overseas, 2 from Poona, 2 from Mangalore, 1 each from Ahmedabad, Rajoori, Mangrole, Deolali, Secunderabad, Lohgao, Chemboor, Ratnagiri, Santa-Cruz, Ahmednagar, Hyderabad, Bandra, Andheri, Karwar and Bengal.

March recorded 696 attacks including 29 imported cases; 14 from the Overseas, 2 each from Bandra, Poona, Busrah, 1 each from Jejuri, Arabia, Belgaum, Goa, Jubbulpore, Mahpan, Bassein, Uran and Aurangabad.

April recorded 441 attacks including 26 imported cases; 6 from the Overseas, 2 from Goa, 2 from Bandra and one each from Calcutta, Bhavnagar, Jaigad, Mangalore, Mandoor, Matheran, Aurangabad, Karachi, Hyderabad (Sind), Rangoon, Madras, Ville-Parle, Bulsar, Nagapatam, Baroda and Chiplun.

From May a rapid decline set in and the month registered 223 attacks; of these 14 cases were imported ; 3 each from the Overseas and Bandra and 1 each from Kumta, Mangalore, Dhond, Jubbulpore, Santa-Cruz, Raigad, Matheran and Goa.

In June there were 68 attacks including 2 imported ; 1 each from Calcutta and Poona. July and August each registered 40 and 8 attacks respectively with 3 cases imported in July, 1 each from the Harbour, Bandra and Secunderabad.

In September there were 5 attacks including 4 imported : 2 each from the Overseas and Taitpalli. October registered 4 attacks, all imported, 3 from the Overseas and 1 from Lahore.

November and December each registered 7 and 22 attacks respectively ; 5 cases from the Overseas were imported in November; 7 cases were imported in December ; 2 from the Harbour and 1 each from the Overseas, Bassein, Lahore, Cawnpore and Kathiawar.

Small-pox by sections.

The highest number of deaths from Small-pox during the year under review was registered in Byculla, namely, 161 giving the death-rate of 2·1 per 1,000 of population in that section ; next in order of incidence follow Worli (64) ·71, Girgaum (57) 1·85, Fort North (56) 2·23, Mandvi (44) 1·32, Tarwadi (42) 1·47 ; Khetwadi and Kamathipura each recording 41 deaths and giving the death-rates of 1·23 and 1·11 respectively ; Mazagon and Umarkhadi each recorded 40 deaths, the respective death-rates being 1·33 and ·21 respectively ; Parel (35) ·76, Second Nagpada (32) 1·47, Market and Mahalakshmi each registered 29 deaths with the death-rates of ·95 and 1·10.

Bhuleshwar registered only 4 deaths from the disease and gave the death-rate of ·10.

Small-pox by Sex and Age.

Of the total number of 1,024 deaths from Small-pox, 651 were males and 373 females.

202 deaths occurred amongst infants under one year, being 18·98 per cent. of the total Small-pox mortality, against 70 deaths or 23·02 per cent. in 1917; of these 102 were males and 100 females. In the age-group of 1 to 5 years and 5 to 15 years 211 (110 males and 101 females) and 127 (76 males and 51 females) deaths were recorded, being respectively 20·60 and 12·40 per cent. of the total; 38·76 per cent. or 397 deaths occurred among population between 15 to 30 years of age (298 males and 99 females).

Vaccinal condition of infants who died of Small-pox.

Of the 202 infants who died of Small-pox during the year, 2 were said to have been vaccinated during the incubation period and 194 not vaccinated at all; in 7 cases the vaccinal condition could not be ascertained.

Vaccinal condition of children admitted into Hospital for Small-

The following table gives the information required by Government in the General Department, under their Resolution No. 3231 of the 21st May 1912, as to the vaccinal condition of children (under ten years) who were admitted for and died of Small-pox during the year in the Arthur Road Hospital. In all 274 were admitted into the Hospital during 1918; of these 104 were vaccinated and 170 unvaccinated. Of the vaccinated, 97 recovered and 7 died. Of the unvaccinated, 110 recovered and 60 died.

Age.	Vaccinated.				Unvaccinated.			
	Admitted.	Died.	Recovered.	Case-rate.	Admitted.	Died.	Recovered.	Case-rate.
1 to 6 months	...	...	...	...	44	20	24	45·4
7 to 12 months	5	...	5	...	27	10	17	37·0
1 to 5 years	42	4	38	9·5	55	21	34	38·1
6 to 10 years	57	3	54	5·2	44	9	35	20·4
Total ...	104	7	97	6·7	170	60	110	35·2

The following table shows the death-rate from Small-pox in the different communities in 1918 calculated per 1,000 of population in the caste; corresponding rates for the preceding year and the mean-rate for the quinquennium (1913-1917) are given for comparison. It will be seen that the ratio for the entire City (1·04) is higher than in 1917 (·27) and is higher than the quinquennial mean (·43). Mussalmans (·53), Parsees (·47), Jews (·60), and Eurasians (·95) registered a lower rate than the City; while Indian Christians (3·39), Europeans (2·01) and Hindus as a whole (1·06) registered a higher rate.

Among Hindu communities Lingaits (3·39), Hindus, low caste, (2·54), Jains (1·36) and Bhatias (1·15) registered a higher rate.

RATE OF MORTALITY FROM SMALL-POX BY CASTE.

Race or Caste.	1917.	1918.	Average of 1913-1917.
Hindus. Jains	·68	1·36	·39
Hindus. Brahmins	·33	1·00	·33
Hindus. Lingaits	·84	3·39	·84
Hindus. Bhatias	...	1·15	·12
Hindus. Hindus of other Castes ...	·27	·91	·43
Hindus. Hindus, Low Caste ...	·46	2·54	·94
Hindus all Castes	·30	1·06	46
Mussalmans	·10	·53	·24
Parsees	·07	·47	·13
Jews	...	·60	...
Indian Christians	·77	3·39	1·16
Eurasians	...	·95	·47
Europeans	·50	2·01	·33
Buddhists	...	...	...
Other and unknown Castes ...	...	7·35	...
TOTAL ...	·27	1·04	·43

Yearly Return of Vaccination (excluding Bandra and Kurla) from the Superintendent of Vaccination, Bombay, for the Year 1918.

Primary Vaccine Operations.

Month.	Total number of persons primarily vaccinated.	Sex.		Caste.																Age.														Results.												Total.	Number of Operations in excess of Persons.	Re-Vaccinations.								Number of Operations in excess of Persons.	Primary Results seen after the sending in of the last Monthly Return.					
				Christians.				Hindoos.					Mussulmans.			Other castes.				Under One Year.				Under Six Years.				Upwards.				Under One Year.			Under Six Years.			Upwards.			Total Results.					Total number of Persons Re-vaccinated.	Sex.		Results.							Under One Year.	Under 6 Years.	Upwards.	Failed.	Total.
		Male.	Female.	Indian Christians.	Europeans.	Indo-Europeans.	Total.	Buddhists and Jains.	Brahmins.	Bhatias and Lohanas.	Hindus of other Castes.	Total.	Mussulmans.	Negro-Africans.	Total.	Parsees.	Hindus, Low-Caste.	Jews.	Total.	3 Months.	6 Months.	12 Months.	Total.	23 Months.	4 Years.	6 Years.	Total.	9 Years.	13 Years.	24 Years.	44 Years.	Total.	Successful.	Failed.	Unknown.	Successful.	Failed.	Unknown.	Successful.	Failed.	Unknown.	Successful.	Failed.	Unknown.	Total.			Male.	Female.	Successful.	Failed.	Unknown.	Total.						
1918.																																																																						
January ..	2,654	1,330	1,324	197	28	..	225	5	162	65	1221	1,453	414	..	414	181	356	25	381	186	731	1113	2,030	356	230	17	603	11	8	1	1	21	1,899	14	117	536	6	61	13	..	8	2,448	20	186	2,654	..	..	5,230	506	6	3	5,729	5,738	..	..	..	..	..	..
February ..	3,159	1,616	1,543	289	50	2	341	15	261	39	1339	1,654	644	..	641	213	273	34	307	240	947	1194	2,381	435	280	26	741	13	17	7	..	37	2,117	17	247	620	8	113	22	4	14	2,759	26	374	3,159	..	..	7,197	2,427	6	9	9,609	9,624	..	..	..	..	..	..
March ..	2,664	1,352	1,312	234	32	..	266	16	283	27	1097	1,423	589	..	589	16	201	22	233	208	751	1027	1,986	333	267	36	736	20	16	4	2	42	1,637	35	316	486	16	134	29	..	18	2,152	51	468	2,666	2	..	13,662	3,770	1	1	17,430	17,430	..	..	..	..	..	..
April	1,420	715	705	79	9	..	88	10	135	5	695	845	174	..	174	92	196	25	221	141	501	510	1,152	127	107	17	251	5	5	5	2	17	1,018	20	114	197	10	44	10	..	7	1,225	30	165	1,420	..	..	3,559	768	..	..	4,327	4,327	..	..	..	..	..	..
May	930	454	496	53	7	..	60	1	78	8	457	544	89	..	89	19	228	13	238	90	341	361	792	79	60	8	147	9	..	2	..	11	706	13	73	116	2	29	9	..	2	831	15	104	930	..	..	1,605	465	2	..	2,68	2,070	..	..	..	..	..	..
June	925	445	480	32	6	..	38	1	57	3	544	605	46	..	46	40	192	4	196	62	333	399	794	70	50	7	127	1	1	2	..	4	729	14	51	112	5	10	4	..	..	845	19	61	925	..	..	461	87	1	1	548	548	..	..	..	..	..	..
July	1,225	568	657	66	7	..	73	2	33	23	697	755	70	..	70	67	258	2	260	70	417	553	1,040	100	71	8	179	5	1	..	..	6	961	19	60	165	5	9	5	..	1	1,131	24	70	1,225	..	..	1,306	258	..	..	1,564	1,564	..	..	..	..	..	..
August ..	1,131	563	568	41	3	..	44	4	29	2	642	677	138	..	138	64	199	9	203	55	382	550	987	75	57	6	138	2	..	4	..	6	924	16	47	127	3	8	2	..	4	1,053	19	59	1,131	..	..	1,102	129	..	..	1,231	1,231	..	..	..	..	..	..
September ..	830	382	448	31	8	..	39	2	21	9	416	448	100	..	100	24	219	..	219	44	261	420	725	65	37	2	104	1	..	..	..	1	642	10	73	96	1	7	..	..	1	738	11	81	830	..	..	782	94	1	..	875	876	..	..	..	..	..	..
October ..	538	249	239	22	3	..	25	1	10	1	289	301	52	..	52	6	149	5	154	19	187	274	480	32	24	..	56	1	1	..	..	2	436	14	30	54	1	1	2	2	.	492	15	31	538	..	..	476	42	1	...	517	518	..	..	..	..	..	..
November ..	1,081	56	520	43	15	..	58	4	45	9	532	590	136	..	136	86	197	14	211	71	312	561	944	84	48	3	135	2	..	..	..	2	846	38	63	116	6	13	2	..	..	964	44	76	1,084	3	..	812	38	..	..	650	650	..	..	..	..	..	..
December ..	1,523	756	767	54	7	..	61	9	90	19	650	768	260	..	260	144	277	13	290	105	420	735	1,260	171	87	1	259	3	1	..	..	4	1,167	19	86	229	8	22	2	..	2	1,398	27	110	1,535	12	..	521	72	24	43	526	593	..	..	..	..	..	..
Total ..		8,991	9,109	1,141	175	2	1,318	70	1,204	210	8,579	10,063	2,712	..	7,712	1,099	2,745	163	2,908	1,221	5,583	7,827	14,571	1,927	1,318	131	3,376	73	50	25	5	153	13,082	229	1,277	2,854	71	451	100	1	52	16,036	301	1,780	18,117	17	..	36,513	8,658	42	57	45,072	45,171	..	..	..	..	..	..
Total..	18,100	18,100		1,318				10,063					2,712			2,908				14,571				3,376				153				18,117			3,376			95			18,117						45,171			45,171														

N.B.—The statement includes vaccinations performed by Private Medical Practitioners and by the Medical Officers of the two Jails and of Colaba Lunatic Asylum

Vaccination Stations.

There are 16 vaccination stations including the Central Vaccination Depôt at Supari Bag Road, Parel; of the stations, three are worked on every Monday morning and two every morning during the rest of the week; while that at the Sanitary Institute, Princess Street, (formerly at Kalbadevi Road) is open every Sunday morning and on week days during the afternoon hours only.

Vaccination is performed every afternoon except on Sundays and holidays at Supari Bag Road, the office of the Superintendent of Vaccination.

Vaccination is a routine duty of the Department throughout the year; and vigorous efforts are made to push it on especially during the cold season.

The total number of vaccine operations performed during the year was 63,278 against 40,194 in 1917.

Vaccine tubes tested.

As to the information asked for in Corporation Resolution No. 8107 of 19th March 1917, 2,610 capillary tubes were bacteriologically examined by the Municipal Analyst during the year under review. No extraneous micro-organisms were reported in any of these emulsions and no emulsion had to be rejected as a result of bacteriological examination. These tubes were samples from 648 glycerinated emulsions.

Measures for Control.

As usual leaflets of precautions against Small-pox were widely distributed and posters put up in conspicuous parts in the City, and the District Registrars and Nurses and the Vaccination staff paid visits to houses, chawls and affected localities to find out unprotected persons and vaccinate and revaccinate in large numbers.

Vaccination of Pilgrims to the Haj.

The number of Mahomedan pilgrims who embarked at Bombay for the Haj during the season from 1st September to the end of October 1918 was 1,361 against 1,339 in 1917; of these 1,060 were vaccinated in Bombay prior to embarkation. 4 males and 3 females were primarily vaccinated and 873 males and 180 females were revaccinated. The operation was carried out under the supervision of the Superintendent of Vaccination. The work of vaccinating female pilgrims was done by the nurse attached to No. 9 District in addition to her own duties. The percentage of pilgrims so vaccinated at Bombay was 77·88 against 89·62 in 1917.

Table of vaccine operations performed among pilgrims to the Haj:—

Year.	Number of Pilgrims to the Haj embarked.	Number of Pilgrims Vaccinated.	Percentage of Vaccination.
1910	18,023	8,278	45·8
1911	22,856	15,140	66·2
1912	15,464	10,587	68·4
1913	15,319	11,198	73·1
1914	11,700	9,102	77·7
1915	2,433	2,311	94·9
1916	2,632	2,449	93·05
1917	1,339	1,200	89·62
1918	1,361	1,060	77·88

The necessity for vaccination and revaccination was during the earlier period of the year widely notified to the public through the press and by distribution of leaflets, detailing the several vaccination stations in the City and the days and the hours of operating. Houses and chawls were as usual visited by the Registration staff as well as by the Vaccination staff to find out cases of the disease to induce their removal to hospital and to arrange for the vaccination of contacts and others, unprotected or inadequately protected. The result was an enormous demand from schools, colleges, clubs and hotels, firms and other business houses, the Docks, the Port Trust and other public offices. There were also numerous calls for vaccination at private houses. This demand was satisfactorily met. In addition to the 16 permanent operating stations in the City, temporary stations were opened at suitable places. Arrangements were made for vaccination in the compound of Mr. J. A. Wadia's bungalow, Malabar Hill, and at the Head Municipal Offices. All possible facilities were thus placed at the service of the City and they were well availed of and appreciated.

. Small-pox among Goans and compulsory vaccination of immigrants, etc.

The epidemic of Small-pox during the year again brought into prominence the excessive incidence of this disease among Goanese subjects of the Portuguese Government as compared with the general population of Bombay.

The experience of the last seven years has been such as to render it very desirable to reconsider the question of ensuring the proper protection of this section of the community by an amendment of the Bombay Vaccination Act, or otherwise. The Corporation made a representation to Bombay Government in 1913 with a view to ensuring the proper vaccination of all classes of the community. These proposals briefly were :—

(1) That immigrants of all ages be compulsorily vaccinated and revaccinated.

(2) That the Government of Portuguese India be moved to introduce compulsory vaccination into their territories.

(3) That Government and other employers of labour should make revaccination a condition of employment.

The reply of Government to these proposals, which was recorded under Corporation Resolution No. 6194 of 15th January 1914, did not favour any further legislation in regard to (1) and (3). In regard to (2), copies of the correspondence with the Government of Portuguese India showed that vaccination and revaccination were already compulsory in Portuguese India. But judging from the result, the practical application of the law does not appear successful.

The measures which I would now ask the Corporation to consider is the vaccination and revaccination of immigrants, particularly Goanese immigrants. It can hardly be questioned that the presence of these insufficiently protected immigrants is a menace to the public health. Small-pox is an extremely infectious disease with a considerable mortality and each case acts as a possible centre of infection and, until removal, a source of danger to the surrounding population; and to take no action to ensure the protection by vaccination of this section of the community is to ignore a considerable danger, which could by suitable means be reduced to reasonable dimensions. As to the remedy to be applied, there are two alternatives, namely to ensure effective vaccination within the limits of Portuguese territory or to vaccinate all Goanese immigrants on their arrival in Bombay.

In view of the unequivocal assurance given by the Governor-General of Portuguese India, that everything possible is being done, it is unlikely that any further action can be taken in that direction beyond placing these facts before him. But as to the vaccination of unprotected or insufficiently protected persons on their arrival in Bombay, no insuperable difficulties need be apprehended once the principle is accepted, as several thousands of pilgrims are vaccinated in Bombay before leaving for the Hedjaz every year.

This is no new question as I have urged in the past the great desirability of introducing compulsory revaccination in Bombay City in view of the perpetual importations of the disease from outside.

Cholera.

Cholera was prevalent throughout the year except in the month of October and assumed epidemic proportions for a week (ending the 12th) in January and again in the week ending the 14th December.

There were 1,662 deaths registered from Cholera during the year under review against 61 deaths in 1917. The number of Cholera attacks was 2,219.

Cholera by months.

197 attacks (including 5 imported cases, 3 from Ratnagiri and 1 each from the Harbour and from Bandra) and 173 deaths were registered in January. 17 attacks (including 2 imported cases, 1 each from Mahad and Bandra) and 17 deaths were registered in February. 2 attacks and 1 death and 1 attack and 1 death were registered in each of the months of March and April. May and June registered 4 and 6 attacks and 3 and 4 deaths respectively; in June 1 case occurred among new arrivals from Calcutta, July registered 9 attacks (including 5 imported cases, 3 from Pandharpur and 1 each from Calcutta and Satara Districts) and 8 deaths. In August there were 16 cases (inclusive of 7 imported, 3 from Deolali and 1 each from Busrah, Kirkee, Ahmednagar District, and from Pratapgad) and 10 deaths. In September there were 5 cases including 3 imported (1 each from Ratnagiri, the Overseas and from Mesopotamia) and 3 deaths. The disease was absent in October. In November there were 12 cases (including 11 in the Cumballa Hill War Hospital) and 6 deaths. But the incidence of the disease received a sudden impetus in December, becoming epidemic in the week ending the 14th.

The epidemic lasted till the end of February of the following year, reaching the height of its virulence in the week ending the 1st February with 3,183 cases and 2,866 deaths from Cholera and 4,480 deaths from all causes in that week.

Compared with the previous epidemics of the disease since the Health Department was established in 1865, this epidemic which lasted for 11 weeks (December 1918 to February 1919) was in point of duration next only to that of 1906 (15 weeks) and in point of mortality (9,640) unapproached by any that has preceded it.

1,950 attacks were registered in the month of December including 29 imported cases, (8 from Ratnagiri, 2 each from Calcutta, Malwan, Mahad and other places and 1 each from Jaigad, Mesopotamia, Sangamnair, Thana, Bankote, Deogad, Alibag, Mahad, Goa, Andheri, Kutch, the Overseas, and the Harbour) and 1,436 deaths.

Measures for Control.

As the disease showed signs of increase, posters and leaflets were printed and the former were put up in prominent places and the latter freely distributed in all parts of the City. Popular lectures were delivered by the officers of the Department in the Sanitary Institute. The Social Service League, the Humanitarian League, and the Hindu Medical Association and the Catholic Medical Relief Committee and others co-operated by distributing the leaflets and explaining the instructions to the poor in the affected localities. Four motor ambulances were lent by the Military Authorities for the removal of patients to hospitals.

The Medical staff of the Districts was supplemented according to requirements. The Conservancy staff—supervising and labour—was strengthened for a better and quicker cleansing of the City. The disinfecting staff was also increased to cope with the increasing work of disinfection. Instructions were issued for a stricter supervision of fruits and sweetmeats exposed for sale and for a closer and more frequent inspection of tea and sweetmeat shops and eating houses and their sanitary condition. Instructions were issued to the Deputy Health Officers and Sanitary staff to see that earthen pots and drinking cups in shops and houses were kept clean and the water was renewed regularly to avoid danger of pollution ; that the vessels and cups in shops were properly cleaned and disinfected with permanganate of potash. House gullies were ordered to be more frequently flushed and pesterined and the privies of buildings in which cases of Cholera occurred as well as the rooms occupied to be thoroughly disinfected. Vernacular instructions were put up at public latrines and urinals and latrines in chawls, etc., instructing people using them to wash their hands after using the latrines in disinfecting fluid which was provided thereat.

Anti-Cholera inoculation by means of vaccine obtained from the Bombay Bacteriological Laboratory, Parel, was offered free to all at Nos. 1, 2, 4, 8, 9 and 10 District Dispensaries, at the Anti-Tuberculosis League Dispensary at Kamathipura 1st Street, every morning and afternoon, from 8 to 10 a.m. and 3 to 5 p.m. (S. T.); at the Health Department Head Office from 12 noon to 2 p.m. and 3 p.m. to 5 p.m. (S. T.); at No. 7 District Dispensary, at No. 144, Bellasis Road, every day from 3 to 5 p.m. (S. T.), and at the Sanitary Institute from 12 noon to 2 p.m. (S. T.)

Visits to houses and chawls were made by the staff to find out cases of Cholera and remove them to hospital and to disinfect rooms, privies, &c.

A special report on the outbreak of the disease has been forwarded to the Municipal Commissioner under my No. H./89/D. of 20th March 1919 for the information of the Corporation.

Cholera by Races.

Of the 1,662 deaths from Cholera during the year under report, 1,491, occurred among Hindus of all classes against 34 in 1917, while 58 against 7 in the preceding year were registered among Mussalmans including Negro-Africans. Indian Christians contributed 84 and Parsees 12 against 19 and 4 respectively in 1917. The small balance of 17 sums up the deaths amongst Europeans (16) and Jews (1). Eurasians and Buddhists registered no death from the disease.

Cholera was most fatal to Hindus who returned the death-rate of 2·17 ; next to Indian Christians who returned the death-rate of 2·03, then follow, in the descending order of incidence, Europeans (1·35), Mussalmans (·32), Parsees (·23) and Jews (·15). The lowest death-rate (·12) was returned by Bhatias.

Cholera by Sex and Age.

The sex distribution of Cholera mortality in the year was 1,121 males and 541 females, the ratio per 1,000 of sex population being males 1·73 and females 1·59 against ·07 and ·04 in 1917.

The proportion of male deaths to female was 2·0 to 1 in the entire population, as well as among Hindus of all classes and Parsees ; 2·8 to 1 among Mussalmans ; 1·6 to 1 among Indian Christians and Europeans.

The disease was most fatal to persons between 15 to 40 years of age, as 1,159 deaths or more than 69 per cent. of the deaths occurred among them ; 780 of these being among males and 379 among females. Among infants or children under 1 year of age, there were 2 deaths from the disease ; in the age-group of 1 to 10 years, there were 83 deaths among males and 56 among females, while in the population aged 50 years and more, 80 males and 27 females died of the disease.

Cholera by Sections.

The general death-rate from Cholera for the whole City was 1·69 in the year under review. The sections which recorded a higher rate were Upper Colaba (3·21), Middle and Lower Colaba (4·67), Fort South (2·02), and Fort North (3·37) in A Ward ; Dhobi Talao (2·71) and Fanaswadi (2·05) in C Ward ; Khetwadi (2·41), Girgaum (3·60), Chowpati (1·93), Walkeshwar (6·57), and Mahalakshmi (1·82), which are all the sections of D Ward ; Byculla (1·77) in E Ward ; Parel (3·67), Sewri (2·77) and Sion (3·12) which are all the sections of F Ward ; and Worli (2·05) in G Ward.

The lowest death-rate from the disease was recorded for Chuckla (·20) and the highest for Middle and Lower Colaba (4·67).

CHOLERA.

Ward.	Sections.	No. of Deaths.	Annual Rate of Mortality per 1,000 of Population.
A	Upper Colaba	5	3·21
	Middle and Lower Colaba	92	4·67
	Fort, Southern	7	2·02
	Fort, Northern	86	3·37
	Esplanade	22	1·23
B	Mandvi	15	·45
	Chuckla	5	·20
	Umarkhadi	12	·26
	Dongri	13	·47
C	Market	30	·99
	Dhobi Talao	105	2·71
	Fanaswadi	111	4·05
	Bhuleshwar	11	·30
	Khara Talao	5	·21
	Kumbharwada	38	1·37
D	Khetwadi	77	2·41
	Girgaum	111	3·60
	Chowpati	22	1·93
	Walkeshwar	70	6·57
	Mahalakshmi	48	1·82
E	Mazagon	37	1·23
	Tarwadi	40	1·40
	Second Nagpada	6	·27
	Kamathipura	15	·40
	Tardeo	17	·61
	Byculla	134	1·77
	First Nagpada	3	·46
F	Parel	167	3·67
	Sewri	53	2·77
	Sion	96	3·12
G	Mahim	13	·42
	Worli	184	2·05
	Harbour, Docks, Railways and Homeless	12	·26
	Total	1,662	1·69

Influenza : Two Epidemics.

In the month of June, a sudden wave of Influenza swept over the City. With an incubation period of twelve to twenty-four hours, it rapidly assumed epidemic proportions and the sickness-rate was so high as to dislocate business and trade. Those who suffered most were those engaged in indoor occupations such as clerks, mill-hands, etc. The prevalence of the fever attracted notice about the 21st June, and by the end of the month, it considerably subsided. The first cases appear to have occurred among arrivals from the overseas in hospitalships and transports. This epidemic lasted for barely four weeks. In that short period it cost the City over 1,600 lives, at least a million working days, an incalculable amount of discomfort, expense and inconvenience. The virus is such that it is practically impossible to prevent its entrance or to control its spread. The disease re-appeared in a pandemic form in the month of September. The mortality rose from 119 on the 10th of the month to 712 on the 30th.

The total mortality of the City was about the normal till about the 10th September, the average daily mortality being 102 ; after that date it began to rise rapidly. It was 219 on the 16th September, 314 on the 19th, 427 on the 23rd, 547 on the 27th, 682 on the 29th and 712 on the 30th idem. There was a considerable concomitant increase in the mortality from Ague and Remittent Fever. The highest total mortality on a single day was 768 registered on the 6th October, including 161 from Influenza, 461 from Respiratory Diseases and 161 from Ague and Remittent Fever. During the worst Plague epidemic in the City, the highest total mortality on a single day was 433 on the 15th February 1900.

The highest daily mortality from Influenza was 187 registered on the 7th October. After that date there was a steady decline. After the 31st October, the mortality fluctuated within narrow limits. 102 was registered from all causes on the 11th November and 96 on the 16th, thus marking the return to normal figures.

Death-rates from Influenza.

The actual number of deaths, that occurred above the normal (of about 90 for this time of the year) during the 62 days of the epidemic from the 10th September to 10th November was 20,258, averaging 326 deaths per day. Assuming the mortality continued so high throughout the year, the death-rate would be 108·17 per 1,000 of the estimated population (over 11,00,000) and 121·48 of the Census population (9,79,445). The death-rate for the year 1917 based on the Census population was 34·09.

Of the total number of 20,258 deaths, 10,506 were among males and 9,752 among females, so that the proportion of women to men who died during this period was 92·82 per cent. against the usual average of 77·24. For every 100 men, there are 53 women in the City.

Considering the mortality from all causes during the period by ages, 36·2 per cent. of the deaths occurred among persons 20 to 40 years old. Among the several communities, Hindus, low caste, suffered most, the death-rate being 61·6 per 1,000 of the caste population ; among Hindus of all other castes, the death-rate was 18·9, among Mussalmans 19·2, Parsees 9, Jews 14·8, Indian Christians 18·4, Eurasians 11·9 and Europeans 8·3.

The Hospital returns show that the case-mortality was 34·2 in the Municipal Infectious Diseases Hospital at Arthur Road, 24·5 in the Labour Corps War Hospital at Dadar, and 43·4 in the Goculdas Tejpal Hospital. The low ratio of the Labour Corps War Hospital appears to have been due to the fact that only male patients were sent to it.

Outside the hospitals, the case-mortality appears to have been about 6·1 per cent. But as only the worst cases and the poorest class of people were received in hospitals, this figure cannot be taken as the index of the case-mortality in the entire population.

Measures for control.

When the mortality began to assume alarming proportions and a pandemic seemed imminent, it was felt that the organisation of the Health Department meant for normal times and ordinary outbreaks of infectious diseases, would not be able to cope with the situation and measures on a vast scale would be necessary. An appeal was therefore made to the public for help. The Medical Relief Committee of the Municipal Corporation met and in consultation with the Municipal Commissioner and the Health Officer decided on the measures to be taken. A Sub-Committee was appointed and met almost daily to carry out a publicity campaign and to bring home to the people what the Health Officer considered necessary to prevent or treat and control the disease.

Circular letters were addressed to large employers of labour suggesting the steps to be taken. English, Marathi and Gujrathi posters were put up and leaflets circulated advising the people to call in medical help or to go to hospital on the appearance of sickness, and offering free treatment and milk and " Pneumonia jackets " in their own homes to those who were reluctant to go to hospital.

The response to the appeal was very gratifying. Volunteers in large numbers came forward and in a very short time relief measures were organised on a scale and in a manner which do credit to those energetic gentlemen and the City.

Temporary Dispensaries and Hospitals.

Temporary or Table Dispensaries were put up in conspicuous places in the City in the localities inhabited by the poor, and at these stock mixtures were kept for distribution. Additional medical men were put on and, in response to my appeal, several institutions and individuals came forward offering personal services and to open temporary hospitals. In all there were in a short time about 100 places in the City where supplies of medicines and milk were obtained. The Hindu Medical Association was earliest in the field; the Jains were the first to open a special hospital at Hirabag in Girgaum; then followed the Social Service League and next the Humanitarian League. The Radiant Club, the Students' Brotherhood, the Students' Social Union at Dadar, the Young Men's Hindu Association and the Presidency Students' Federation, the St. John Ambulance Divisions, Professors and Students of the Wilson College and students of the Grant Medical College and many other citizens of Bombay volunteered their services. Many other philanthropic individuals and institutions organised relief according to the needs of the locality and community they served. House to house visits were paid to find out cases of sickness and send them to hospital and, if reluctant, treat them in their homes by providing them with medicines and milk.

Temporary hospitals were opened by different communities: Lohanas at Mazagon; Bohras at Null Bazar; Patharo Prabhus at Chowpati; Parsees at the Parsee Fever Hospital and the Bomonji Petit General Hospital, Cumballa Hill; Jains at Hirabag, Girgaum; and Marwaris at Kalbadevi. Two wards at the Maratha Hospital were placed at the disposal of the Hindu Medical Association who had an Hospital also in the Jain Boarding at Elphinstone Road. A ward of 20 beds to begin with was set apart for Parsee patients in the Arthur Road Hospital. The Military Authorities also rendered much valued assistance; they lent us 12 hospital orderlies and 4 motor ambulances for the removal of patients to hospital and placed 400 beds at our disposal in the Labour Corps Hospital at Dadar for the reception of Influenza patients and arrangements were made also at the Goculdas Tejpal Hospital.

Dr. J. S. Nerurker, the Superintendent of Vaccination, was placed on special duty to assist voluntary agencies in organising relief measures and to co-ordinate the voluntary efforts of individuals and institutions to the best advantage.

Gifts from the Public.

The Western India Turf Club lent their large offices at the Club as an Intelligence Bureau and gave a generous donation of Rs. 5,000 towards relief in connection with the epidemic.

Several gifts in cash and kind were received from individuals and some firms and mills.

The Red Cross Depot supplied sleeping suits and the Military Authorities, through the Barrack Master, Colaba, supplied cots to meet the sudden emergency.

On the subsidence of the disease, the temporary dispensaries were withdrawn on the 1st November from places where they were no longer needed and planted at the Docks and Railway Stations and thence finally removed on the 5th November.

Two special reports fully dealing with the outbreaks of the disease were submitted to the Municipal Commissioner for the information of the Corporation.

Tuberculosis.

The number of deaths registered in 1918 as due to Tuberculosis was 2,513 and compares as follows with the preceding years:—

Year.	No. of deaths from Tuberculosis.	
1918	2,513	including 292 deaths among inmates of War Hospitals.
1917	2,118	including 112 deaths among inmates of War Hospitals.
1916	1,902	including 62 deaths among inmates of War Hospitals.
1915	1,710	
1914	1,889	

This increase does not necessarily signify a corresponding increase in the incidence of the disease. The fact is that modern methods of diagnosis have made it possible to identify the disease in its earlier stages, with the result that cases which under other circumstances would have been classed incorrectly as "Fever" and "Bronchitis" are now correctly diagnosed and shown as Tuberculosis. The facilities provided by the King George V Anti-Tuberculosis League through their Dispensaries for advice and treatment bring to notice many cases which would otherwise have remained at home undetected and untreated. The Annual Reports of the League record how during the domiciliary visits paid by its medical officers and nurses "their advice is listened to with attention, often pertinent questions are asked and from among the listeners patients and contacts are revealed."

Tuberculosis by sections.

The following table gives the Tuberculosis mortality and the death-rate per 1,000 of population in the sections during 1917 and 1918.

The death-rate from the disease in the entire City in 1918 (2·56) was higher than in 1917 (2·16) and higher also than the mean of the preceding five years (1·99).

The sections which recorded very high ratios were:—

—	Death-rate.	Number of deaths in War Hospitals.	Death-rate after deducting the mortality in Hospitals in the Section.
Fort, Southern	26·28	77	4·04
Upper Colaba	13·48	5	10·27
Sion	7·26	170	3·87
Esplanade	6·09	35	4·11
Kamathipura	5·99	.....	.....
2nd Nagpada	5·76	.....	.....
Tardeo	5·29	.....	.....
Tarwadi	4·53	.....	.....
Fort, North	4·25	.....	.....
Girgaum	3·80	.....	.....
Mahalakshmi	3·38	5	3·19
Khara Talao	3·08	.....	.....

The sections which recorded very low rates were Dongri (·84), Bhuleshwar (·76), Mazagon (·43), Byculla (·98), Parel (·59) and Sewri (·52).

MORTALITY AND DEATH-RATE PER 1,000 OF SECTION-POPULATION FROM TUBERCULOSIS.

Ward.	Sections.	1917.		1918.		Average of 1913-1917.	
		No.	Rate.	No.	Rate.	No.	Rate.
A	Upper Colaba	12	7·70	21	13·48	7	4·49
	Middle and Lower Colaba.	38	1·93	36	1·82	24	1·21
	Fort, Southern	50	14·44	91	26·28	26	7·53
	Fort, Northern	114	4·48	108	4·25	74	2·91
	Esplanade	69	3·88	108	6·09	63	3·54
B	Mandvi	80	2·40	83	2·49	78	2·34
	Chuckla	60	2·47	38	1·56	85	3·50
	Umarkhadi	92	2·01	97	2·12	127	2·78
	Dongri	12	·44	23	·84	29	1·06
C	Market	45	1·49	33	1·09	42	1·39
	Dhobi Talao	59	1·52	62	1·60	59	1·52
	Fanaswadi...	51	1·89	34	1·24	38	1·38
	Bhuleshwar	38	1·04	28	·76	40	1·09
	Khara Talao	61	2·65	71	3·08	70	3·04
	Kumbharwada	61	2·20	72	2·59	68	2·45
D	Khetwadi	72	2·25	95	2·97	87	2·72
	Girgaum	83	2·69	117	3·80	76	2·46
	Chowpati	31	2·74	23	2·01	26	2·28
	Walkeshwar	25	2·16	17	1·59	18	1·69
	Mahalakshmi	60	2·28	89	3·38	52	1·97
E	Mazagon	10	·33	13	·43	16	·53
	Tarwadi	101	3·55	129	4·53	86	3·02
	Second Nagpada	116	5·34	125	5·76	88	4·05
	Kamathipura	216	5·85	257	5·99	186	5·61
	Tardeo	117	4·21	147	5·29	91	3·27
	Byculla	81	1·07	74	·98	97	1·28
	First Nagpada	16	2·47	14	2·18	15	2·33
F	Parel	39	·85	27	·59	43	·94
	Sewri	10	·62	10	·52	11	·57
	Sion	86	2·80	123	7·26	44	1·43
G	Mahim	45	1·47	69	2·26	47	1·54
	Worli	160	1·78	168	1·87	133	1·48
	Harbour, Docks, Railways and Homeless.	8	·17	11	·24	8	·17
	Total...	2,118	2·16	2,513	2·56	1,954	1·99

Tuberculosis by Race or Caste.

The following table shows the death-rate from Tuberculosis in the different communities in 1918, calculated per 1,000 of population in the caste ; corresponding rates for the preceding year and the mean rate for the quinquennium (1913-1917) are given for comparison. It will be seen that the ratio for the entire City was 2·53 ; Hindus as a whole registered 2·31, Europeans 1·42, Jews 1·36, and Parsees ·96, rates lower than those of the City ; while Mussalmans (including Negro-Africans) (3·99), Eurasians (3·82), Indian Christians (2·61) registered a higher rate. All the communities, excepting Brahmins (1·75), Bhatias (1·79), Parsees (·96), Jews (1·36), and Europeans (1·42) recorded a higher rate than the average of the preceding five years.

RATE OF MORTALITY FROM TUBERCULOSIS BY CASTE.

Race or Caste.	1917.	1918.	Average of 1913-1917.
Hindus. Jains	2·54	2·59	2·54
Hindus. Brahmins	1·26	1·75	1·21
Hindus. Lingaits	16·11	11·02	11·02
Hindus. Bhatias	2·44	1·79	2·05
Hindus. Hindus of other Castes	1·75	2·17	1·54
Hindus. Hindus, Low Caste	3·59	3·96	3·26
Hindus, all Castes	1·91	2·31	1·69
Mussalmans (including Negro-Africans)	3·47	3·99	3·41
Parsees	·92	·96	·98
Jews	1·97	1·36	1·51
Indian Christians	2·35	2·61	2·54
Eurasians	1·91	3·82	1·91
Europeans	1·00	1·42	·84
Buddhists	6·92	25·95	34·60
Other and unknown Castes	7·35	7·35	.....
TOTAL ...	2·16	2·53	1·99

Proposed provision of beds for Tuberculosis by the Municipality.

In my last Annual Report I recorded the steps which were being taken to give effect to my recommendations made in 1915 for providing beds for the treatment of Tuberculosis : that the Municipal Commissioner had agreed to the suggestion that the proposal for extending and improving the Arthur Road Hospital for Infectious Diseases should be proceeded with so that when the required land was acquired and filled in, a hospital for 25 or more beds for Tuberculosis could with greater advantage be provided on a site well away from other buildings; and that the Executive Engineer had accordingly been furnished the details of accommodation required. There is no further progress to record under this head.

Work for the prevention and treatment of Tuberculosis : The Anti-Tuberculosis League :—

The work in connection with the prevention and treatment of Tuberculosis in the City is being carried on by the King George V Anti-Tuberculosis League in close co-operation with the Health Department. The League has two Dispensaries with a Medical Officer in charge of each and three nurses. All cases coming to the notice of the Medical Officers are reported to the Health Officer and the District Registrars for disinfection, etc., and the District Registrars notify to them cases which come to their knowledge so that the homes of such persons come under the supervision of the League.

During the year under report 1,215 Tubercular patients were treated at the Princess Street and Kamathipura Dispensaries of the League against 972 in 1917. The total number of such cases treated since 1913 was 4,388 and their racial distribution was as under :—

Race or Caste.	No. of cases.	Nature of Tuberculosis.
Hindus	2,395	Pulmonary, Glandular, Tuberculosis of bone, etc.
Mussalmans	1,050	
Parsees	418	
Christians	467	
Jews	58	
	4,388	

Reference was made in the last year's Report to the contemplated establishment of a Sanatorium by the League within easy access in the City so as to induce the people to segregate and isolate patients, so that they could be easily visited by their friends and relatives. The opening ceremony of the Sanatorium, which is situated on a hillock to the north east of old Government House, Parel, was performed by Their Excellencies Lord and Lady Willingdon on the 7th December, 1918.

The Sanatorium is to be utilised for (1) treating early cases; (2) segregating advanced cases ; (3) treating glandular Tuberculosis in children and (4) for an open air school.

Fevers.

The number of deaths registered under the general heading of " Fevers " (including Scarlet, Enteric, Malaria, Ague and Remittent and Relapsing Fevers) was 4,553, being 2,104 more than in 1917, and 2,033 more than the average of the preceding quinquennium and 1,689 more than the decennial average (1908-1917); the rate of mortality from Fevers per 1,000 of population (4·46) was more than in 1917. The large increase in mortality under this head is due to a considerable proportion of deaths from Influenza having been classed under Ague and Remittent Fever during the earlier days of its prevalence. Scarlet Fever recorded no death as in the preceding year. Relapsing Fever registered 9 deaths against 5 in 1917.

To Enteric Fever 125 deaths were due, being 45 less than in 1917 and 25 less than the average of the preceding quinquennium.

Malaria recorded 200 deaths, being 62 less than in the preceding year and 36 less than the average of the preceding quinquennium (1913-1917).

From Ague and Remittent Fever 4,219 deaths were recorded, being 2,207 more than in 1917 and 2,087 more than the average of the preceding quinquennium.

The following statement gives the monthly variations of mortality in 1918 from all kinds of Fevers in general and from each type separately. The maximum mortality from Fevers was reached in September (849) during the Influenza epidemic while in 1917 it was recorded in May (249); the lowest registered was in August (223) while in 1917 it was recorded in February (143).

FEVER MORTALITY BY MONTHS IN 1918 AND 1917.

MONTHS.	1918.					1917.
	Enteric.	Malaria.	Ague and Remittent.	Relapsing.	All Fevers.	All Fevers.
January	11	18	244	.....	273	166
February	11	14	212	.....	237	143
March	13	20	295	1	329	219
April	14	22	314	7	357	238
May	8	19	264	1	292	249
June	8	19	228	.....	255	213
July	16	14	389	.....	419	238
August	17	7	199	.....	223	201
September	11	19	819	.....	849	189
October	10	15	675	.....	700	182
November	2	17	249	.....	268	198
December	4	16	331	.....	351	213
Total ...	125	200	4,219	9	4,553	2,449

Malaria.

Measures for gauging the incidence of Malaria were continued during the year.

Distribution of Malaria work amongst the Deputy Health Officers.—As the Malaria operations decreased, the special Department, which was in charge of a Special Assistant to the Health Officer since 1912, was partly reduced from the 1st September 1918, and the staff distributed amongst the seven Deputy Health Officers, who now supervise the work. The special Malaria staff at present consists of—

2 Medical Inspectors,

16 Sub-Inspectors,

32 Coolies, and

4 Mukadums

distributed in all the seven Wards under the direct control of the Deputy Health Officers.

The special Department was created for controlling breeding places of the Anopheles species, in connection with the control of Malaria in the City. But, as the operations advanced, all mosquito breeding places including those of Culex and Stegomyia, were dealt with as far as possible. The Department which was in charge of Dr. Shroff for the last seven years took great pains to educate the public by placards, leaflets and lectures with the help of magic lantern slides, and its efforts in combating Malaria in the City were attended with considerable success.

Spleen Examination—Visits were paid to poor class houses, chawls, and charitable institutions, and children were examined for enlarged spleen. The results are embodied in the following table :—

Ward.	Section.	Total No. of children examined.	No. found with enlarged spleen.	Percentage by Sections.	Percentage by Wards.
A	Colaba (Upper)...	82	1	1·21	3·61
	Middle & Lower Colaba				
	Fort Southern	43	2	4·65	
	Fort Northern	549	26	4·73	
	Esplanade	709	21	2·96	
	Total	1,383	50	3·61	
B	Mandvi	171	3	1·75	2·66
	Chuckla	216	9	4·16	
	Umarkhadi	217	2	0·92	
	Dongri	156	4	2·56	
	Market	214	8	3·73	
	Total	974	26	2·66	
C	Dhobi Talao	703	23	3·37	2·41
	Fanaswadi	307	4	1·33	
	Bhuleshwar	168	3	1·78	
	Khara Talao	225	5	2·22	
	Kumbharwada	379	8	2·11	
	Total	1,782	43	2·41	
D	Khetwadi	381	13	3·41	4·44
	Girgaum	463	21	4·53	
	Chowpati	...	...	...	
	Walkeshwar	286	16	5·59	
	Mahalakshmi	311	14	4·50	
	Total	1,441	64	4·44	
E	Mazagon	472	18	3·81	2·79
	Tarwadi	526	33	6·27	
	2nd Nagpada	333	5	1·50	
	Kamatipura	207	3	1·44	
	Tardeo	612	12	1·96	
	Byculla	1,201	26	2·16	
	1st Nagpada	372	7	1·18	
	Total	3,723	104	2·79	
F	Parel	58	...	...	0·38
	Sewri	...	...	...	
	Sion	202	1	0·49	
	Total	260	1	0·38	
G	Mahim	2,131	...	...	0·00
	Worli	2,665	...	...	
	Total	4,796	...	...	
	Harbour, Docks, Railways and Homeless	...	...	...	
	Grand Total	14,359	288	2·01	2·01

It will be seen from this that the spleen rate is under seven per cent. in all the sections of the City.

Fort North and Esplanade sections also show a very appreciable reduction in the spleen rate :—

Sections.	1909.	1913.	1915.	1916.	1917.	1918.
Fort North ...	49·44	15·27	10·19	5·36	6·21	4·73
Esplanade ...	73·88	15·63	7·53	9·71	4·44	2·96

Tarwadi, which is very low-lying, shows a spleen rate of 6·37 as compared with 5·38 in 1917 and 13·97 in 1916.

The spleen rate for the whole city was 2·01 as compared with 3·16 in 1917 and 4·09 in 1916.

The following table shows *the spleen rate by castes* in 1918 as compared with the preceding three years :—

Castes.	Total Number of children examined in 1918.	Number found with enlarged spleen.	Percentage.			
			1915.	1916.	1917.	1918.
Hindus	12,062	207	2·53	4·22	2·88	1·72
Mussalmans	1,336	39	2·69	3·52	3·50	2·92
Parsees	216	11	7·71	5·26	5·95	5·09
Indian Christians	380	16	5·66	4·04	7·00	4·21
Jews	364	15	3·41	0·00	8·53	4·12
Buddhists	1	Nil.	....	....	....	....
Total ..	14,359	288	....	4·09	3·16	2·01

Spleen Examination of children attending Municipal Schools—The Medical Inspectors appointed by the Schools Committee examined the spleen of children attending the Municipal schools ; the results are embodied in the following tables :—

(*a*) *Table by Sex* :—

Sex.	Number of children examined.	Number found with enlarged spleen.	Percentage.
Boys	3,846	125	3·27
Girls	3,182	203	6·38
Total ...	7,028	328	4·66

(*b*) *Table by Caste* —

Caste.	Number of children examined.	Number found with enlarged spleen.	Percentage.
Hindus	5,586	282	5·04
Mussalmans	1,307	41	3·13
Parsees	135	5	3·70
Total ...	7,028	328	4·66

Random sampling:—The parasite rate by Wards and sections during the year was as under :—

Ward.	Sections.	Month.	No. of slides examined.	No. in which parasites found.	Percentage.
A	Fort, North	March	72	2	2·77
	Esplanade	February and May ...	203	2	0·98
	Total for A Ward ...		275	4	1·45
C	Dhobitalao	July	95	3	3·15
D	Khetwadi	November	53	*Nil.*	0·00
	Girgaum	December	102	1	0·98
	Chowpati	April	102	2	1·96
	Total for D Ward ...		257	3	1·16
E	Tarwadi	July	102	2	1·96
	Byculla	April	102	2	1·96
	Mazagon	September	77	1	1·27
	Total for E Ward ...		281	5	1·77
	Grand Total ...		908	15	1·65

The District Registrars sent 35 specimens of blood of patients suffering from Malaria and parasites were detected in one only, giving a percentage of 2·86.

The comparative results of examination for spleen and parasite rate of the *temporary C. I. Trust Chawls near Carnac and Paltan Roads* was as under :—

Particulars.	1910.	1913.	1914.	1915.	1916.	1917.	1918.
Spleen rate	36·00	18·01	14·89	8·33	8·42 March.	4·32	3·70
Parasite rate	19·17	3·12	4·44	1·17	13·58 Dec.	2·10	1·23

Mortality from Malaria.—The total number of deaths from Malaria during the year was 200, against 263 in the preceding year. Deducting 26 deaths, in the different War Hospitals, 26 amongst the homeless, 1 imported case which terminated in death (*i.e.*, came from outside suffering from Malaria and died within 15 days) and 22 in the Harbour, the mortality from Malaria in the City is reduced to 125, giving the death-rate of 0·12 against 0·18 in 1917.

Malaria cases and Deaths in War Hospitals.—The following table shows the number of Malaria cases admitted and deaths in the different War Hospitals in the City during the last three years :—

1916.		1917.		1918.	
Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
3,284	22	3,544	37	3,090	28

The following table shows at a glance the spleen and parasite rates and Malarial mortality by Wards for the last seven years :—

Ward.	Spleen Rate.							Parasite Rate.							Mortality from Malaria.						
	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1912.	1913.	1914.	1915.	1916.	1917.	1918.
A ...	33·50	15·57	12·32	6·95	7·83	4·63	3·61	10·54	2·98	2·51	0·76	0·37	0·67	1·45	91	65	51	37	58	55	36
B ...	15·03	3·18	6·31	3·45	3·37	2·81	2·66	3·01	2·89	1·42	0·00	0·00	0·00	0·00	101	47	25	32	32	26	27
C ...	9·99	4·89	5·50	2·91	2·38	3·78	2·41	14·14	1·88	1·38	0·00	0·00	0·00	3·50	58	53	42	28	39	38	28
D ...	3·90	3·41	5·77	2·81	2·55	2·30	4·44	0·00	0·00	1·86	0·00	0·00	0·00	1·16	22	24	22	18	34	29	12
E ...	11·40	4·96	4·56	5·26	5·54	4·49	2·79	7·97	5·45	1·58	2·83	3·41	1·18	1·77	56	47	45	50	46	57	13

Chemical Analysis of Water.—33 samples of well water were chemically analysed by the Municipal Analyst; out of these 4 were found fit for potable purposes, 10 fair, 4 suspicious and the remaining 15 unfit for potable purposes.

Quinine Distribution.—Free distribution of *Quinine Hydrochloride Tablets* was continued during the year. The District Registrars, Sub-Registrars, Nurses, Lady Health Visitors, Malaria Inspectors and Sub-inspectors distributed the tablets by house to house visits specially during the Fever season. The quantity thus distributed was:—

Grains II ... ... tabloids 3,700
Grains IV ... ... tablets 28,160

1,526 ounces of *quinine sulphate powder* was supplied to the ten Municipal Dispensaries and the two Infectious Diseases Hospitals.

218 *specimens of Anopheles larvæ* were examined during the year and tabulated as under:—

Neocellia stephensi	15
Nysso-Myomyia rosie	195
Myzorhymohus barbirostris	5

Malabar Hill Reservoirs and Filters :—All the filters have been provided with concrete covers on the top. The windows on the west side have been blocked up. The work of covering the Reservoir No. 2 is in progress.

Bhandarwada Reservoir.—Larvæ of *Neocellia stephensi* are found to breed off and on in the filters of the Bhandarwada Reservoir.

Victoria Gardens:—

(*a*) All the 105 masonry garden tanks have been filled in and brought above the ground level, their bottoms cemented, sloped, and provided with holes and stoppers so as to get them thoroughly cleaned whenever required.

(*b*) The well has been covered over with concrete and a wire-gauze trap-door.

(*c*) A portion of the artificial streams and the ponds to the west of the aquatic birds cage have been filled in and the work of filling in some other ponds, etc., is in progress.

Wadalla Dye-pits, tanks and quarry holes.—Out of 23 such places, 9 have been filled in; the work of filling in one more is going on and the remaining 13 are under action.

Sewri wells.—Out of the 21 wells on Sewri Cross Road in close vicinity of the new quarters provided by the Bombay Port Trust for their employés, 4 have been filled in, 3 hermetically covered (a hand pump being fixed in the cover of one well), 6 covered with trap doors (one of them being an iron sliding trap-door), 2 are being filled in, one being hermetically covered up, and 5 are under fish trial.

The following table shows the number of wells by Wards and sections, filled in, protected, etc., upto 31st December 1918 :—

No. of wells protected.

Wards.	Sections.	Total No. of wells.	No. of wells filled in.	No. of wells hermetically covered.	No. of wells hermetically covered with hand pumps fixed.	No. of wells covered with trap-doors.	No. of wells covered with trap-doors and hand-pumps fixed.	No. of wells under fish trial.	No. of wells under correspondence.	No. of wells in which work to be done by the Municipality.	No. of wells under notice.	No. of wells in Court.	No. of wells not breeding.	Total No. of cisterns covered-up.
A	Upper Colaba..	65	25	11	3	18	4	2	..	..	..	..	2	1,113
	Middle and Lower Colaba													
	Fort, South.	54	19	18	7	5	4	1	..	..	..	..	..	501
	Fort, North	542	94	129	10	270	9	18	1	..	..	..	11	438
	Esplanade ..	71	17	17	6	19	10	..	..	..	..	..	2	1,468
	Total ..	732	155	175	26	312	27	21	1	..	..	..	15	3,520
B	Mandvi ..	76	18	8	7	29	9	2	2	..	..	..	1	325
	Chukla ..	78	29	22	9	11	3	1	3	..	..	..	..	160
	Umarkhadi ..	50	22	13	3	9	2	1	..	..	..	..	..	175
	Dongri.. ..	14	10	..	2	..	1	1	..	..	..	..	..	151
	Market ..	279	22	74	36	104	21	3	12	..	..	..	7	470
	Total ..	497	101	117	57	153	36	8	17	..	..	..	8	1,281
C	Dhobi Talao ..	411	37	77	19	239	18	7	..	..	..	..	14	291
	Fanaswadi ..	253	20	29	19	118	25	27	..	..	..	..	15	277
	Bhuleshwar ..	174	18	36	12	56	18	8	..	..	..	..	26	138
	Khara Talao...	11	4	1	2	3	..	1	..	..	..	..	..	57
	Kumbharwada..	50	12	9	7	17	..	3	..	..	..	..	2	48
	Total ..	899	91	152	59	433	61	46	..	..	..	..	57	811
D	Khetwadi ..	235	54	52	17	85	10	5	5	..	..	..	7	518
	Girgaum ..	333	54	77	14	131	33	5	2	..	..	..	17	195
	Chowpati ..	153	48	33	11	39	12	5	4	..	..	..	1	324
	Walkeshwar ..	137	33	12	9	40	12	5	5	..	..	..	21	949
	Mahalakshmi ..	140	32	19	10	37	10	7	10	..	..	..	15	787
	Total ..	998	221	193	61	332	77	27	26	..	..	..	61	2,773
E	Mazagon ..	101	32	11	7	27	4	5	11	..	..	..	4	260
	Tarwadi ..	116	26	21	8	37	8	4	6	..	..	..	6	710
	2nd Nagpada..	8	1	3	4	..	..	..	..	..	..	..	..	119
	Kamathipura ..	9	4	4	1	..	..	..	..	..	..	..	..	154
	Tardeo ..	35	6	8	2	14	2	1	..	..	..	..	2	414
	Byculla ..	84	45	10	9	12	5	..	1	..	..	..	2	621
	1st Nagpada...	2	1	1	..	..	..	..	..	..	..	..	..	121
	Total ..	355	115	58	31	90	19	10	18	..	..	..	14	2,399
F	Parel ..	95	24	6	1	6	2	6	12	..	3	1	34	336
	Sewri ..	112	11	3	2	8	2	12	29	1	13	13	18	164
	Sion ..	325	27	1	1	18	4	17	37	1	14	6	199	198
	Total ..	532	62	10	4	32	8	35	78	2	30	20	251	698
G	Mahim ..	546	32	13	2	8	..	192	30	..	4	4	261	31
	Worli ..	364	28	7	3	5	..	139	19	..	1	1	161	489
	Total ..	910	60	20	5	13	..	331	49	..	5	5	422	520
	Grand Total. ..	4,923	805	725	243	1,365	228	478	189	2	35	25	828	12,002

No. of tanks protected.

The following is a list of big tanks in the City which have been filled in, protected, etc., upto 31st December 1918 :—

Ward.	Tanks filled in.	Tanks covered up.	Tanks open.
A.	1. Big underground masonry tank in Watson's Annexe. 2. Tank in Forbes Ice Factory.	Nil.	1. Mint tank. 2. Nakhoda tank.* (Is being filled in and the work is in progress.)
B.	Nil.	Nil.	Mumbadevi tank.
C.	1. Dhobitalao tank. 2. Cawasji Patel Tank. 3. & 4. Two tanks in Thakordwar temple compound. 5. Old Girgaum Swimming Bath in Shankerset's compound.	1. Vithoba tank. 2. Bhagirthi tank in Dadysett Agiary Street.	1. Bhuleswar Tank. 2. Tank in Maharaja's compound in Bhuleshwar.
D.	1. Gowallia Tank. 2. Tank in Shankerset's temple compound on Tardeo Road. 3. Chabildas tank on Nepean Sea Road. 4. Isa Alli's tank on Grant Road.	1. Tank in Powalla's compound in Khetwadi 10th Lane. 2. Gamdevi temple tank.	(Mahaluxmi temple tank.)
E.	1. Mustan tank. 2. Nawab's „ 3. Nanabhoy's tank. 4. Tank in Lady Northcote Orphanage. 5. Piroo Mahomed Oil Mill tank. 6. Motabhoy tank in Byculla. 7. Adenwalla's tank on Tardeo Road. 8. Tank in Byculla Cotton cleaning Factory. 9. Kadwani tank. 10. Tank at No. 97 Arthur Road (Mr. Ramchandra Balaram's plot).	1. Mukba's tank on Parel Road. 2. Temple tank in Hansraj Lane. 3. Ghorupdeo temple tank.	(Surya Kund tank.)

Low Lands—Steps for filling in the low-lying plots of ground were continued and several large plots of low ground were filled in, in E, F and G Wards.

The following table shows the number of prosecutions *for wells and large tanks only*, instituted during 1918 with their results :—

No. of cases instituted.	No. complied with, withdrawn and acquitted.	No. convicted and fined.	Amount of fine.
87	79	8	Rs. 50

Government Grant.—A grant of Rs. 25,000 was sanctioned and paid by the Bombay Government for Anti-Malarial measures in Bombay City during the year, in addition to Rs. 50,000 paid in previous years.

The following table shows the work carried out by the Executive Engineer in respect of private wells and tanks out of the Government grant during 1918 :—

Ward.	Situation of the well.	Nature of work carried out.
A.	*Nil.*	*Nil.*
B.	*Nil.*	*Nil.*
C.	*Nil.*	*Nil.*
D.	Well at No. 42, Kandewadi	Covered over with concrete and a trap-door.
E.	*Nil.*	*Nil.*
F.	(1) 4 wells at No. 51 and 52, Naigaum Road...	3 wells covered over with concrete and iron sliding trap-door and 1 well filled in.
	(2) Well at No. 559, Sewri Cross Road ...	Hermetically covered over with concrete and a hand-pump fixed.
	(3) Well at No. 647 and 675, Sewri Cross Road.	Covered over with concrete and iron sliding trap-door.
	(4) Well at No. 528, Sewri Cross Road ...	Filled in.
G.	(1) Well at No. 558, Elphinstone Road (Kumbhargully).	Filled in.
	(2) Well at Mahim Fort (Sepoy's Well) ..	Covered over with concrete and a wire-gauze trap-door.
	(3) Well at No. 69, Purbhadevi Road (Road-side).	Filled in.

Municipal wells and tanks.—The following Municipal wells and tanks were filled in or covered during the year:—

1. Well opposite the General Post Office ... Provided with a concrete cover and a hand-pump.
2. Well in the Victoria Gardens ... ... Provided with a concrete cover and a wire-gauze trap-door.
3. Well in the Vaccination Depot ... ... Filled in.

Non-mosquito-proof condition of wells already protected:—Many wells which were once covered and rendered mosquito-proof were detected with trap-doors left wide open or covers in a non-mosquito-proof condition. Fresh action had to be taken in all such cases.

Cisterns:—Almost all the cisterns in the City have been rendered mosquito-proof, but when their lids are opened for cleaning and repairs, etc., the owners very frequently fail to close them properly, with the result that action has again to be taken against them. A large number of old cisterns have thin plate covers, which do not fit properly and have to be cemented, to render them mosquito-proof. In all new cisterns, properly fitting caplike covers with arrangements for lock and key are now enforced.

Storm-water entrances:—There are 5,843 storm-water entrances in the City as under:—

A	ward	1,470
B	„	447
C	„	671
D	„	1,075
E	„	1,500
F	„	230
G	„	450
	Total ...	5,843

During the dry season, those in A, B, C, D and E Wards are covered either with wrought iron plates placed underneath the gratings or by concrete blocks. But during the 4 months of the monsoon, they remain open to allow storm-water to run through the gratings. When there is a long break in the rains, there is every chance for mosquitoes to breed, mostly Culex and Stegomyia. As far as possible, when there is a long break in the rains, the water entrances are treated with a larvacide, but the result is not satisfactory, as the mosquitoes which breed in the drain at the open end travel through the underground channel and come out through the gratings. In many cases, during the dry weather the covers are tampered with, with the result that they remain in a non-mosquito-proof condition till detected.

Road watering hydrants:—Many of the road watering hydrants in the City are flush with the road. Loafers and beggars take out water from these hydrants, in which there is always a collection of water and the covers are frequently left open. With this type of hydrant it is impossible to avoid water being left in the hydrant-box after road watering. It is also impracticable to prevent people opening the box and leaving it open. This pattern of hydrant is gradually being replaced by the stand-post pattern which has not the defects referred to.

Gully traps:—Owners were called upon to cover these in A and D Wards but owing to high prices, action in this direction has been suspended temporarily.

Casks and tubs full of water kept in bullock and horse stables:—A proposal to require the provision of troughs in all such stables instead of casks and tubs has been approved by the Municipal Commissioner.

The following table shows the summary of work done during 1918; in the last column is shown the work done since the Malaria Branch was started:—

Particulars.	Total for 1918.	Total from 1912 upto 31st December 1918.
Number of wells filled in	39	805
Number of wells hermetically covered	13	968
Number of wells covered with trap-doors	21	1,593
Number of houses inspected by the staff (including repetitions).	1,27,021	11,61,770
Number of notices issued *re*: cisterns, etc.	426	3,590
Number of cisterns hermetically covered	211	12,002
Number of children examined for spleen	14,359	1,10,542
Number of blood slides examined	908	8,965
Number of larvæ samples classified	218	9,500
Number of lectures delivered	1	31
Number of quinine pills distributed (Total)	31,860	2,06,430
Number of „ „ Grains II	3,700	57,200
Number of „ „ Grains IV	28,160	1,49,230
Number of pools treated with pesterine	15,122	19,171
Number of odd receptacles removed	11,136	48,359

Note.—14 wells, *viz*., 5 hermetically covered and 9 covered with trap-doors previously, have been filled in during the year in addition to the 89 wells shown above.

Measles caused 486 deaths, being 265 more than in the foregoing year and 262 more than the average of the previous five years. Measles.

From Influenza 3,964 deaths were registered against 5 in 1917 and 3 the average of 1913-1917. Influenza.

Whooping Cough occasioned 11 deaths, being 3 less than in the previous year but 1 more than the average of 1913-1917. Whooping Cough.

To Diarrhœa 1,796 deaths were due, being 186 more than in 1917 but 75 less than the average of the preceding quinquennium. Diarrhœa.

From Dysentery 1,001 deaths were registered, being respectively 20 and 176 more than in the foregoing year and the average of the preceding five years. Dysentery.

Puerperal Septicæmia caused 324 deaths, being 72 more than in the last year and 69 more than the average of 1913-1917. Puerperal Septicæmia.

No case of Puerperal Septicæmia occurred among those attended by the Municipal Nurses during the year.

To Leprosy 124 deaths were due, being 40 and 46 more than in 1917 and the average of the previous quinquennium respectively. Leprosy.

Cancer registered 84 deaths against 86 in 1917 and 72 the average of 1913-1917. Cancer.

The number of deaths amongst children born prematurely was 368, being 22 more than in the antecedent year and 131 more than the average of the preceding five years. Premature Birth.

To Debility 3,411 deaths were due, being 832 more than in 1917 and 1,133 more than the average of 1913-1917. Debility.

The number of deaths from Old Age was 3,241, being respectively 1,250 and 1,690 more than in the foregoing year and the average of the previous quinquennium. Old Age.

The Diseases of the Nervous System caused 2,749 deaths, being 686 more than in 1917 and 858 more than the average of the previous five years. Diseases of the Nervous System.

To the Diseases of the Circulatory System 413 deaths were due, being 44 more than in the antecedent year and 60 more than the average of 1914-1917. Diseases of the Circulatory System

Tubercle of Lungs registered 2,246 deaths, being 371 more than in the foregoing year and 583 more than the average of the preceding quinquennium; of these 292 deaths were among the inmates of War Hospitals. Tubercle of Lungs (Phthisis).

The work of control and treatment of Venereal Diseases in the City is carried on by the League for Combating Venereal Diseases, inaugurated at a largely attended conference of medical men—civil and military—in March 1917 at the instance of the Bombay Sanitary Association. The League has now been for a year strenuously endeavouring to combat Venereal Diseases in Bombay by various means. The work began with the opening of offices and information bureau at Princess Street and Kamathipura, where information and advice are given to the Public; educational literature published both in English and the vernaculars is freely distributed. In February 1918 the League opened a Dispensary at Lamington Road—well equipped with all the necessaries for free diagnosis and treatment of Venereal Diseases by modern methods. The Dispensary has on its staff a Medical Officer and a Nurse and has proved to be a very great strategic centre in the crusade that has been undertaken. This work has been possible only through the generosity of the Western India Turf Club who gave the start to the League with a donation of Rs. 30,000 for initial expenses and the maintenance of the Dispensary, etc., for about twelve months and added a sum of Rs. 5,000 during the year under report. The Municipal Corporation, ever ready to assist institutions working for the good of the City, have been pleased to make a grant of Rs. 7,500 for one year. The Government of Bombay have been approached for assistance. Control of Venereal Diseases in Bombay.

During the period from 1st March 1919 to February 1919, the number of patients registered in the Dispensary was 964. Of these 7 left before diagnosis was completed and 232 were diagnosed as non-venereal. The racial distribution of the remaining 725 cases was—

Europeans	37
Indian Christians	90
Hindus	317
Mussalmans	224
Jews	20
Parsees	37

In 95 of these cases definite information was not available. Of the remaining 630 cases—

		Males.	Females.
254	were of Syphilis	215	39
293	„ „ Gonorrhœa	154	139
83	„ „ Soft Chancre	68	15

	Syphilis.	Gonorrhœa.		Soft Chancre.	
Left improved and fit ...	45	56	Discharged cured ...	70	Cases with complications sent to Hospitals for early surgical treatment. 29
Returned fit and in normal health though continue under observation.	174	.....	Left improved ...	4	
Continue treatment...		76	Under treatment ...	5	
Came in only for diagnosis.	20	30			
Sent to J. J. Hospital ...	16	19			
„ „ Cama Hospital ...	1	9			
Left to continue treatment...	15	36			
Discontinued	13	37			
Cured		71			

Diseases of the Respiratory System.

From the Diseases of the Respiratory System 23,487 deaths were registered, being 12,256 more than in 1917 and 14,489 more than the average of 1913-1917.

Diseases of the Digestive System.

To the Diseases of the Digestive System 1,920 deaths were due, being 445 more than in the preceding year and 674 more than the average of the previous quinquennium.

Diseases of the Lymphatic System

The Diseases of the Lymphatic System caused 13 deaths against 15 in the antecedent year and 11 the average of the last five years.

Diseases of the Urinary System.

From the Diseases of the Urinary System 268 deaths were registered, being respectively 24 and 30 less than in 1917 and the average of 1913-1917.

Diseases of the Generative System.

The Diseases of the Generative System caused 216 deaths, being 3 less than in the foregoing year but 52 more than the average of 1913-1917.

Diseases of the Organs of Locomotion and Connective Tissue.

From the Diseases of the Organs of Locomotion and Connective Tissue 90 deaths were registered, being 11 more than in the preceding year and 4 more than the average of the last five years.

Accidents.

The number of deaths from Accidents and Violence was 643 during the year under report, being 31 less than in 1917 and 19 less than the average of 1913-1917. Of these 57 were due to poisoning, being 3 less than in the foregoing quarter and 2 less than the average of the preceding quinquennium; of these 16 were suicidal, 27 accidental, 3 from snake-bite and in 11 cases the circumstances under which the poison was administered were not known. Drowning caused 91 deaths as in 1917, being 9 more than the average of the preceding five years; of these 18 were suicidal, 28 accidental and in 45 cases the circumstances under which the deaths took place were not known.

Municipal Dispensaries.

The twelve Municipal Dispensaries, including "Parbhadevi Road Dispensary" and "Bai Gowrabai Dispensary" at Kamathipura, were open throughout the year to administer, as in the past, free medical relief to the sick poor of the City.

The actual number of new cases (individuals) treated at the Dispensaries during the year was 1,07,745 (71,341 males and 36,404 females) against 1,02,921 in 1917, making 4,22,547 the total number of attendances against 4,14,889 in the preceding year. Of these 2,851 patients were seen at their houses.

The diseases treated at these Dispensaries were Small-pox, Measles, Plague, Fevers, Influenza, Diarrhœal Diseases, Diseases of the Respiratory, Digestive, Nervous, Urinary, Generative and Circulatory Systems and other general and local diseases.

The actual number of new cases treated individually at the Colaba and Victoria Bunder Charitable Dispensaries (to which a contribution is paid by the Municipality and which are under the control of the Registrar No. I District. who visits them daily) was 7,961 (5,546 males and 2,415 females) against 10,799 in the antecedent year, making 29,844 the total number of attendances; out of these, 23 patients were seen at their houses.

Notification of Infectious Diseases.

The number of notifications of Infectious Diseases received during the year was 1,962 against 1,673 in 1917. Of these, 748 were of Plague, 352 of Phthisis and other Tubercular Diseases and 862 of other Infectious Diseases.

From *hakims* and *vaidyas* no notifications were received during the year.

The percentage of notifications received had steadily risen from 11·29 in 1910 to 23·35 in 1916 but fell to 18·26 in 1917 and to 14·07 in the year under report.

Certification of the cause of death.

The total number of certificates of the cause of death received during the year was 13,043 against 10,062 in the preceding year ; of these, 5,901 were from qualified medical practitioners, 166 from *hakims* and *vaidyas* and 5,995 from various Hospital Authorities. The causes of 681 and 300 deaths were certified by the Commissioner of Police and the Coroner of Bombay respectively. The percentage of certification had risen from 8·66 in 1910 to 17·01 in 1916 but fell to 16·60 in 1917 and to 10·39 in 1918.

The cause of 1,333 deaths was certified by the Registrars after seeing the persons during their last illness, the cause of 41,976 deaths was certified by the Registrars on the information gathered from the relatives of the deceased and of 2,036 after seeing the dead bodies.

Year.	No. of Notifications received from			Percentage of total Notifications to number of cases reported by District Registrars.	Number of Certificates of Cause of Death received from			Percentage of total Certificates received to Total Mortality.
	Medical Practitioners.	Hakims & Vaidyas.	Total.		Medical Practitioners.	Hakims & Vaidyas.	Total.	
1910	1,487	68	1,555	11·29	2,894	134	3,028	8·66
1911	1,551	53	1,604	11·63	3,994	287	4,281	12·24
1912	1,687	31	1,718	11·32	4,891	289	5,180	13·29
1913	1,765	34	1,799	15·07	4,620	236	4,856	15·26
1914	1,746	30	1,776	16·00	4,620	203	4,823	15·14
1915	836	.....	836	12·15	3,501	152	3,653	15·42
1916	2,665	1	2,666	23·35	5,033	169	5,202	17·01
1917	1,673	2	1,675	18·26	5,355	189	5,544	16·60
1918	**1,962**	...	**1,962**	**14·07**	**5,901**	**166**	**5,995**	**10·39**

Copies of certificates issued.

During the year 1,239 copies of certificates of registry of death and 237 of those of birth and 16 true copies of birth and death reports and medical certificates were issued and the total fees received on account of them and for searches of Birth and Death Registers for indefinite periods as well as for producing such Registers in Courts of Law amounted to Rs. 2,015-0-0 against Rs. 1,380-0-0 in 1917.

Notices under the Act.

The number of notices served by the Health Department during the year under the various sections of the Municipal Act was 4,542 against 3,974 in 1917. Of these, 2,146 were complied with, 1,647 were not complied with, 201 cancelled, the parties having complied with the requirements of the notice, and 548 were pending at the close of the year.

In 3,176 cases summonses were issued by the Presidency Magistrates at the instance of this Department against 3,982 in 1917. Convictions were obtained in 1,163 cases and in 1,068 cases the parties were warned and discharged ; 58 cases were dismissed, 833 withdrawn, the offences having ceased, 54 cases were pending at the close of the year.

Of the notices 37 were issued against over-crowding, 7 in C Ward, 28 in E Ward and 2 in G Ward against 33 in the preceding year ; of these 25 were complied with, 2 cancelled and 5 were pending at the close of the year. In the remaining 5 cases which were not complied with, summonses were issued by the Presidency Magistrates, 2 cases were withdrawn, 2 were pending at the close of the year and in 1 case conviction was obtained.

Conservancy Work.

The number of carts of cutchra, drain stuff and other matter emptied at the Tardeo Flats and other places in the City during the year was 6,26,958 against 7,15,034 in 1917 ; of these, 5,24,430 were departmental and 1,02,528 private.

During the year 62,334 night-soil and cesspool carts and 34,86,622 night-soil baskets were emptied at the several night-soil depots in the City, as compared with 70,877 night-soil and cesspool carts and 36,18,451 night-soil baskets in 1917. The decrease in the year under report of 8,543 night-soil carts and 1,31,829 night-soil baskets was due in part to the conversion of a number of basket privies into water-closets. During 1918, 161 water-closets were substituted for basket privies against 396 in 1917.

Administration of Public Health.

For administration purposes the City has been divided into seven Wards, each under the subordinate charge of a Deputy Health Officer who is responsible for the sanitary and malarial work of his Ward. The Deputy Health Officers are assisted by a staff of Sanitary and Malaria Inspectors. The Deputy Health Officers are under the direct control of the Executive Health Officer who is assisted by two Assistants.

For the purposes of Registration of Births and Deaths and free Medical Relief, the City has been divided into ten Districts with ten Municipal Charitable Dispensaries, each in charge of a Registrar, assisted by two Sub-Registrars who are all qualified medical men ; one trained visiting nurse and midwife is attached to each District Office. In addition to these ten Dispensaries two more were opened in 1912, one at Parbhadevi and the other, " Bai Gowrabai Dispensary," at Kamathipura ; the former Dispensary is in charge of Registrar No. 10 District and the latter of No. 8 District. Each of the District Offices is equipped with staff for registering births and deaths, inquiring into the cause of death, checking cemetery returns and for disinfecting houses and rooms where cases of infectious diseases have occurred or dead rats have been reported. The work of the Registrars is supervised by the Deputy Health Officers and the Executive Health Officer with his two Assistants.

There is also a Special Assistant Health Officer in charge of the Arthur Road Hospital for Infectious Diseases and the Maratha Hospital for Plague.

There was also a Special Assistant to the Health Officer for Malaria in charge of a special department till 31st August 1918, after which date (from 1st September 1918) the work was transferred to the Deputy Health Officers.

For analytical and bacteriological examination, there is a Municipal Analyst in charge of a fully equipped Chemical and Bacteriological Laboratory where chemical analysis and bacteriological examination of Municipal waters is conducted by him. The Veterinary Staff includes three Inspectors, one Assistant Inspector with a Shalotri who are qualified Veterinary Surgeons and inspect the milch cattle stables in the City and the Municipal bullocks and are in charge of the Municipal Bullock Hospital and the segregation sheds at Tardeo Flats specially erected for the cure and treatment of animals found to be suffering from Infectious Diseases.

The Vaccination Staff includes, besides the Superintendent and the Assistant Superintendent, one Head Vaccinator and nine other Vaccinators, one head clerk and four subordinate clerks.

The Conservancy and Sanitary Staff, exclusive of the labour staff, consisted in 1918 of—

1	Conservancy Superintendent (appointed from 1st July 1918).
3	Chief Inspectors (including 2 Halalcore Chief Inspectors).
9	Sanitary Inspectors.
14	Conservancy Inspectors (including House-drain Inspectors).
14	Assistant Sanitary Inspectors and Sub-Inspectors.
59	Sub-Inspectors (including House-drain Sub-Inspectors).
2	Halalcore Inspectors.
32	Sub-Inspectors.
5	Sub-Inspectors for the control of sale of adulterated milk.

Prosecutions by the Health Department for infringing license conditions and selling adulterated milk.

666 prosecutions for infringing license conditions were instituted by the Deputy Health Officers, A to G Wards, and in 448 cases convictions were obtained and the parties fined ; in 17 cases the parties were warned and discharged. 9 cases were dismissed and 86 withdrawn ; 7 cases were pending at the close of the year.

Destruction of stray and ownerless dogs.

During the year under review 7,071 stray dogs were caught ; out of the number 6,966 ownerless dogs were destroyed by carbonic acid gas at the Lethal Chamber provided for the purpose on Tardeo Flats and 105 returned to their respective owners.

Improvement of Insanitary Areas and U. H. H. Buildings and Rooms.

During the year further progress was made in condemning, under section 378 of the Municipal Act as amended towards the close of 1916, buildings or rooms in buildings unfit for human habitation. These are condemned with the sanction of the Standing Committee, on a joint certificate of the Executive Health Officer and the Executive Engineer, by prohibiting their further use either absolutely or until such improvements as will render them fit for human habitation have been certified as carried out.

Unwholesome food seized and destroyed by the Health Department Staff.

During the year under review, action under sections 415 and 416 of the Municipal Act for the seizure and destruction of unwholesome food was continued as in previous years by the staff of this Department and a list of such articles seized and destroyed in the seven Wards of the City is given below :—

A Ward :—168 oranges, 206 mangoes, 3 pomegranates, 14 tins asparagus, 7,834 lbs. cheese, 1,23,664 tins condensed milk, and 5,511 lbs. chocolates.

B Ward :—25 mangoes, 65 plantains, and 20 bags damaged wheat.

C Ward :—427 guavas, 136 guavas and plantains, 419 mangoes, 107 apples, 191 peech and apples, 192 plantains, 67 figs and 111 figs, guavas and plantains.

D Ward :—51 apples, 211 mangoes, 17 oranges, 56 plantains, 3 popais, 2 pomegranates, 18 water-melons and 6 seers brinjals.

E Ward :—Garlic, 17½ bags and 224 lbs. ; Dal assorted qualities 15 bags and 164 lbs.: Dry fish, 118 bundles, 11 bags and 492 lbs.; Long fish, 120 lbs. ; Biscuits, 54 tons and 22 lbs. : Biscuits, Cubia, 6 cases and 3 tons ; Turmeric, 7 bags and 16 lbs. ; Coriander Seed, 5 bags and 10 lbs. : Oatmeal, 16 tons and 92 lbs. ; Oats Quaker, 21 lbs. ; Cocoa, 3 lbs. ; Pepper, white, 3 pints ; Pepper, black, 1 bag ; Milk, 71 tons ; Milk, Condensed, 13 cases ; Coffee, 1 tin ; Tea, 1 tin ; Curry stuff, 160 lbs. ; Mustard, 13 tins ; Mustard Oil, 4 tins : Barley Pearl, 2 tins ; Chillies, 6 bags, 30 lbs. ; Powah, 1 bag ; Cheese, 37½ lbs. ; Cheese, Chudder, 17 lbs. ; Sugar, 3 bags ; Pickles, 9 Jars ; Pickles-Cabbage, 10 jars ; Ghee, 162 tins and 6 lbs. ; Ghee crew, 1 tin and 1 lbs. ; Tamarind, 13 bags ; Salt Pork, 350 lbs. ; Bottled Fruits, 2 quarts ; Butter, 13 tins ; Butter, Danish, 42 lbs. ; Curvinseed, 1 bag ; Marconi, 2 packets ; Almonds 1 packet and Raisin, 621 tins.

F Ward :—3,327 lbs. meat, 178 lbs. fish, 166 lbs. sweets, and 330 lbs. fruits.

G Ward :—Mangoes 36, halva (Indian sweets) 28 seers, slices of cocoanut 5 seers, bora (Indian fruit) 8 seers, onions 13 seers, plantains 13 dozens, and oranges 14 dozens.

In my fifteenth Annual Report (for 1914) I reviewed the progress that had been made since 1901 as regards the various problems affecting the sanitation and the Public Health Administration of the City, and indicated the stage that had been reached. I referred to the various agencies and favouring circumstances and conditions that had assisted in the improvement that had been achieved in public health and the vista of further improvement opened up by the application of the measures that had been found successful in the past. "It has been frequently pointed out," I said, "how the work of the Health Department of Bombay differs from that of a large City in Europe, how many and how difficult the problems are, and if we have made any progress, it is to a great extent due to the guiding influence of the Municipal Commissioner and the general support of the Corporation combined with the constant supervision, the education of the people in the value of sanitary measures and to the harmonious working of the Department with the co-operation of the Public".

Following the example of 1915, it would have been desirable as well as pleasant to continue here the narration of progress made during the last four years, especially in view of the fact that this is the last Annual Report which I shall have the privilege of submitting to the Corporation as their Executive Health Officer. But unluckily there is little progress to recall or report owing to the unfortunate circumstances connected with the War and other factors which operated to the serious detriment of public health in various ways and thus set back the clock of progress even in essential matters of sanitary improvement.

Even amidst the distractions of the War and the new problems and duties it brought, the imperative duty of pressing the urgency of the various questions, the early and adequate solution of which is calculated to improve the sanitary condition and health of the City, was never lost sight of but urged with incessant emphasis on the attention of the authorities. It would be sufficient to quote from a few of my reports. Addressing the Municipal Commissioner in August 1917 on the subject of general sanitation and the conservancy system of the City, I said:

General Sanitation and Conservancy of the City..

" I would draw your attention to the correspondence on the subject since 1901 and particularly to two letters addressed by me to the Municipal Commissioner, dated the 15th and 25th August 1905 and 1906, and much correspondence since then—see my letter to the Municipal Commissioner of 16th September 1914.

" I regret to say that with the exception of the introduction of 16 motor waggons and the reduction of some bullock carts we are in still the same position as in 1905.

" If the depôt at Null Bazaar (which is undoubtedly a nuisance for want of a better place) is done away with and we lose the Colaba siding we shall be in a worse position than we were then, as we shall be short of bullocks and carts and the whole of the refuse of the City will have to be hauled through the streets.

" The population has much increased, the no. of sick and wounded in Hospitals is very large and the erection of labour camps and hospitals give the labour staff of the Health Department much more to do—while the facilities for doing it have not increased.

" I make no excuse for so constantly bringing this to your notice because it is of much urgency and I would point out that the position we are now in is due to the fact that the question of providing facilities for removal and disposal of refuse has not met with that support which the subject demands. It is impossible to improve the health of the City while the primitive conditions which existed 20 years ago still remain: I refer to the conservancy methods and the basket privies and open drains.

" Many years go the Corporation approved the proposal to instal incinerators and provided the money. We are not nearer the accomplishment of that improvement than we were then and every word I said in 1905 is true now. I would suggest that the whole subject be placed before the Corporation and the reasons given for the delay, and sanction be obtained to erect an incinerator at once and the question of the refusal of the Railway Cos. to provide siding accommodation for refuse removal placed before Government.

" The excuse that prices have risen and the works cannot be carried out during the War does not hold good, as all the proposals were approved before the War and money sanctioned; they should have been in operation years ago. Even now they are of far more urgency than many matters over which large sums of money are being spent and which could well be delayed.

" The health of the people and the sanitation of the City I place first, as it includes everything which tends towards prosperity, progress and development.

'All the sanitary works I have recommended and been approved of by the Corporation and not carried out during the past 10 years could have been done out of revenue by increasing halalcore tax by 1 per cent. or levying a special sanitary rate of 1 per cent. or 1 per cent. general tax, thus providing Rs. 5,00,000 per annum. This however may be said is no concern of mine but it is the custom in towns in England where the average taxation is over 8 s. in the 1 £ or 40 per cent.

" But had Rs. 5,00,000 per annum been set aside every year for sanitary improvements and those improvements actually been carried out, there would be no need to raise a loan and the health and surroundings of the people would have been enormously impoved.

" This is only one item of many sanitary improvements necessary.

" The drainage of the City and of the north of the Island has been before the Corporation for years and if a concrete plan and estimates were got out which the Corporation could approve, the Corporation would have done so, but owing to conditions and circumstances and the want of unanimity on the part of the Executive nothing is done.

" I need scarcely remind you of the question of insanitary areas and dwellings for the poorer classes which still remains practically in the same position as it did in 1903.

" I have frequently brought to your notice other deficiencies which exist and in my Annual Report for 1916 I have again summarised them.

" I feel so strongly that Bombay is making no progress in the directions I have mentioned, and what improvements we have made are due not to facilities given, but to supervision and control and voluntary efforts on the part of the Health Department and by education and instruction of the people, that unless these questions are earnestly taken up by the Corporation and they insist that the works sanctioned by them are carried out, no progress in the sanitation of the City can be made.

" Many people are obsessed with the idea that the duties of the Health Department are solely connected with cleansing the streets, cleaning house gullies and emptying privies, controlling a large and troublesome labour staff, preventing strikes, exacting work, altering the habits of the labour staff with regard to sloth and immorality and educating them to a sense of right and wrong and rendering them conscious of their duty and willing to do it; supervised as it is by a staff many of whom require as much attention as the labourer himself. These duties have been carried out by the Health Department for many years and with a certain amount of success in spite of the many difficulties pointed out by the Chief Accountant.

" In Bombay we must accept the fact that this branch of the Public Health Administration is of the utmost importance. But there is much more interesting and equally valuable work done daily which is rarely heard of by the Commissioner or the Corporation and which could be much developed, were the Health Officer not hampered by the work of immediately supervising the conservancy of the City which could be done by a responsible Officer who need not necessarily have had a training in sanitary science.

" A very great proportion of all complaints of nuisances due to defective water supply, drainage, house connections, over-crowding, insanitary houses, sanitary conveniences, chokes in drains, surcharging of sewers, collection of mud on roads, condition of the roads, blocking of pavements by shop-keepers come to us. We are held responsible by the public and the Corporation for matters that we have absolutely no control over. The Health Department look at a nuisance as a menace to health, whatever form it takes, and wish to abate it as their duty to the Department and the public—but owing to the circumstances mentioned above, any action for abatement is terribly slow and the progress is almost at a stand-still.

" I can quote dozens of instances where no progress is made because of these defects in the system.

" Take a few instances :—

" For years, we have been trying to improve the condition of privies. We are met with objections from the Water Engineer that the water supply is not sufficient and from the Executive Engineer that the building cannot stand the weight of a tank; if this be so, it is doubtful whether the margin of strength of the house is not so insufficient as to cause the house to be considered unsafe for human habitation; and from the Drainage Engineer that the sewers cannot take the sewage.

" We have tried to get insanitary areas improved, houses unfit for human habitation condemned, with absolutely no result.

" We have pointed out that thousands of people live in insanitary huts in the heart of Bombay and the suburbs which are a disgrace to the City. Such huts are allowed to be erected daily—see Foras Road, Babula Tank, Ambewady, &c.

" We have pointed out the defective conditions of buffalo stables and objected to their being licensed. They are licensed and re-licensed. We have objected to land in the heart of the City being covered with temporary bullock stables and huts. They are allowed. All this means unnecessary accumulation of refuse difficult to remove. We make proposals for better collection and disposal of refuse by incineration and motor haulage. What is the result? The incinerator is as far off as ever and we are hampered by the refusal of the Railway Co. to provide refuse sidings.

" We represent that the drainage system is defective and ask for improvement. We have for years asked that the Health Department labour staff and bullocks should be properly housed

"In Bombay, the Municipal Commissioner, if he approves of a suggestion, represents it to the Corporation, the ultimate result depending on the approval of the Corporation and the desire on the part of the Commissioner and other departments for carrying out the work.

"The routine is that after the subject in question has been approved by the Municipal Commissioner, an estimate is made out by the Executive Engineer; in course of time it comes up for sanction by the Corporation and funds are provided and the proposal sanctioned; it now rests with the Municipal Commissioner and the Engineering Department to see it through.

"Until lately, there has never been a question of want of funds; money has always been available and never has the sanction of the Corporation been withheld to any proposal of this Department.

"What is wanting is pressure and active co-operation and continuity of action.

"I wish it to be clearly understood that these remarks refer only to those matters which require the assistance of other departments. Those suggestions and improvements which require no assistance have been approved by the Municipal Commissioner, adopted by the Corporation and carried out, and if we complain that we do not get the assistance we think we ought to get in other matters, it is no doubt due to the fact that other departments cannot carry out our demands as rapidly as we could wish and cannot appreciate in the same way our desire to improve the condition of the City as it appeals to us.

"The haulage by motors was sanctioned in 1908. These were supplied without any difficulty—no other departments could interfere except by asking for tenders. The proposal to adopt incineration was approved at the same time.

"I will give other instances:—

"Complaints are made as to the condition of the roads, collection of mud, &c.; we have to write to the Drainage Engineer or the Road Department who do the work by contract. The mud is periodically scraped up, placed in heaps on the road as a rule and left there an indefinite time. We draw the attention of the Drainage Department to chokes of drains; the reply usually is—it is due to the halalkhore putting night-soil in the drains or the sewer is surcharged. We pass a plan for a house demanding a water-closet; instead of a water-closet a basket privy is often put in. We represent to the Executive Engineer's Department and advise them to withhold the completion certificate; the reply is the Health Department must take action under the Act.

"We report that certain streets are blocked by shop-keepers and others and that packing cases are opened and refuse thrown out of the shops; we are referred to the section of the Act telling us to prosecute. There are some streets which it is practically impossible for our staff to clean, owing to the huge accumulation of packing cases.

"The dual control of cleansing the streets, that is to say, the removal of litter by the Health Department and the mud by the Engineering Department is absurd; the whole system of cleansing roads and footpaths should be under one Department and all the road cleaning staff and the appliances and plant placed under the control of a capable man who knows how roads should be cleaned and more modern appliances placed at his disposal.

"All this sounds as if we were hardly used and are blaming other Departments; but it merely implies that the system is wrong; and that until greater facilities are given, no officer however energetic will improve the sanitation of the City until these disabilities are removed." (Extracts from a letter to the Municipal Commissioner in 1914).

"I must therefore ask the Corporation to seriously consider our position.

"For want of improved facilities and methods for collection, removal and disposal of the City refuse and sewage, we are except for the motor waggons in the same position as we were in 1905, but the population, the number of houses and streets, factories, stables, &c., have considerably increased and the City has greatly expanded.

"To put the conservancy system and the cleansing of the streets on a sound footing we must have greater facilities and more supervision.

"1. I ask therefore that a Superintendent of Conservancy be appointed and a Conservancy Branch of the Health Department created.

"2. That the installation of incinerators be undertaken at once; this has been before the Corporation for many years, approved but not carried out.

" 3. To compel the Railway Companies to provide siding accommodation and haulage at Colaba and Carnac Bridge and other suitable places.

" 4. That the staff and the supervision of the workshops be so increased and improved that the delays which occur now should be avoided.

" 5. To purchase 6 1½- ton motor waggons to assist in removing the refuse pending the provision of sidings and incinerators. These waggons will each do the work of 10 pairs of bullocks more expeditiously and cheaper.

" 6. That the drainage system of the City be improved and basket privies abolished and a scheme for draining the north of the Island be undertaken at once.

" These are only a few matters calling for immediate attention on the special points referred to; the other subjects I have mentioned from time to time and are summarised in my Annual Report for 1916 and are questions which urgently require the attention of the Corporation as being absolutely necessary in the near future if Bombay is to make any improvement in sanitation."

Note.—A Superintendent of Conservancy was appointed on 1st July 1918 and the number of refuse motor lorries increased by the addition of one of 5 tons and two of 1½ tons in 1918, but the motor service is far from satisfactory owing to the large proportion of lorries that are laid up from time to time and the delays that occur in effecting the necessary repairs in the Municipal Workshops.

The Storm-water Reservoir and the Storm water drain from Bellasis Bridge to Love-Grove.

My letter No. 21067 of 2nd October, 1912 to the Municipal Commissioner ran as follows :—

" I beg to draw your attention to the condition of the open drain leading from Byculla Bridge to Love Grove, the accumulation of sewage and storm water in the low-lying land between the Vellard and the Mahalakshmi Station and the condition of the storm water channels which, in addition to the offensive smell, are causing a serious nuisance owing to the breeding of mosquitoes.

" I have asked the Engineer's Department to pump out the water from the Reservoir and thus minimize the nuisance caused thereby—but nothing has been done and I trust you will support me in this.

" We are pesterining the surface but without much effect.

" The open storm water drain is at present nothing less than a 'septic tank' ; it has been there now ever since the rains began and from what I can learn will remain until the gates at Love Grove are put down and kept sea-proof so that the sewage can be pumped into the sea.

" The question is, I think, under consideration but I fear, unless pressed, it will remain so indefinitely.

" The open storm water channels leading from Haines Road to Worli and the other channel from Dadar are nuisances—the danger of which apart from the mosquito breeding it is difficult to estimate. They are nothing less than stagnant collections of filthy water.

" The question is a large one but not by any means too large to be dealt with satisfactorily if properly approached.

" I understand that Mr. Midgley Taylor has given an opinion on these points and that a proposal will shortly be made to alter the present system.

" But in the meantime for many years to come the insanitary conditions will remain. I understand that the existing pumps can deal with the present flow of sewage, and could by pumping extra time do a good deal more.

" Of course, I am not conversant with the details of the engineering side of the question.

" The open storm water drain from Byculla Bridge to Love Grove is half-full of semi-solid stagnant matter. If no more sewage is allowed to enter the drain and the gates at Love Grove are kept shut down sea-proof, could not the pumps lift this sewage now instead of waiting until the usual time—the end of October. This drain would then only have to deal with the storm water, which is inconsiderable and the stagnant water in the Reservoir would be removed.

" I would suggest to the Municipal Commissioner the urgency of taking this work in hand and would point out that it is of such importance that if a representation were made to Government that funds be provided and assistance given, Government could not fail to recognise the necessity of it.

" I have prepared a report on the subject which, I suggest, should be sent to Government asking them to depute a Sanitary Engineer to give an opinion on the best method of dealing with this question. I have my own ideas of how it can be done but not being an engineer, prefer to express my opinion on its necessity as a health measure.

" Although much has been done to improve the sanitary condition of the City during the past 18 years, no large work of any importance, having a direct bearing on the public health and involving expenditure of any serious amount from *capital* has been carried out during that period.

" What has been done in improving public health has been due to organisation and systematic and constant supervision, and not to capital expenditure.

" The Corporation have fully recognised the necessity for and freely sanctioned annual expenditure on medical relief and control of diseases and the cleanliness of the City and have also approved and sanctioned works which directly affect the health of the City, but the works have not yet been carried out.

" In this connection, I would refer you to all my Annual Reports especially that of 1914 in which I gave a resume of the work done and the works necessary and pointed out the difficulties of improving the health of the City while certain conditions existed.

" *Vide* my Annual Report for :—

(1) 1901 : Page 162, paras. 54 and 55 (2) and (3)
„ 163, para. 57 (3)
„ 164 „ (E)

(2) 1906 : Sanitary Measures :

Resume of the proposals to improve the method of sewage and refuse removal, pp. 25-28.

(3) 1908 : P. 29

" The house drainage and storm water drainage prove stumbling blocks in the way of progressive sanitation." Again under " Future Development of the City."

(i) Remove the outfall at the Love Grove to Deonar and render the area of five miles of western foreshore and the land behind fit for magnificent building sites.

(ii) Utilise the existing pumps, and more if necessary, at different parts of the Island for lifting the sewage into a high level main.

By removing the outfall at Love Grove and with an improved sewage system to remove sewage from the City direct, the land made available may be utilised for building and reducing the congested areas and widening the streets.

(4) 1909 : (1) Drainage and sewerage of the New Sewri Reclamation, p. 35 ;
(2) Drainage and sewerage of the Northern parts of the City, p. 35 ;
(3) The Bombay Town Planning Bill, pp. 36-38.

(5) 1910 : Drainage and sewerage of the Northern parts of the City, pp. 40-41.

(6) 1914 : { Page 2. Paras 2-3
Reclamation of the Storm water Reservoir, pp. 46-47 especially the last 6 lines of para 1 on p. 47.

Again, on page 75 : " The condition of many of the sewers and house drains and storm water drains has been reported on from time to time, and although being gradually improved, leaves much to be desired."

What I mean is that there is no important work standing out to which the Corporation can point out and say:

" This is a valuable work executed, directly affecting the health of the City."

" It might be said that the water works and drainage of the City and the erection of certain chawls for the labour staff, roads, set-backs, &c., are important works but these are, I submit, works which must be carried out as a necessary corollary of Municipal Administration and extension of the City. What is wanted and what will be appreciated by the ratepayers and the public and visitors and others is a definite attempt to improve the conditions under which the people live in Bombay, whether they be resident in Malabar and Cumbala Hills or in the sweepers chawls at Tardeo.

" I fully realise the difficulties in obtaining materials, labour and money but the importance of improving the method of removal and disposal of sewage and the nuisance caused by the open storm water drain and the storm water reservior is so great that I must urge the Commissioner to take some steps to remedy this nuisance. For the moment I omit everything but the inadeqate system of drainage and the method of disposal of water in condition of the houses in the undrained part of the Island and the accumulation sewage and the low-lying and undrained areas.

" These questions have been put up to every Municipal Commissioner during the past twenty years. Much money has been spent in other directions but little on anything having a direct bearing on the health of the City.

" The drainage system of the Island consists of sewers running along the main streets from Colaba to Parel with an outfall at Love Grove Pumping Station. Where the gradient is defective, Shone's ejectors are used and Compressor Stations installed at several points. During a normal monsoon the sewers are surcharged and the ejectors cannot lift the sewage nor can the pumps at Love Grove pump it out to Sea.

" The following is a description of the drainage system by Mr. Maughan, the Drainage Engineer :—

"At Bellasis Bridge there are the old main drains discharging eventually at Love Grove sluices and the main ovoid sewer gravitating to the pumping station.

"Before the construction of the sewer, the old main drain conveyed the whole of the sullage and storm water to the sea.

"Practically all the house gullies in the City are now connected to the sewers, but owing to the fact that the great majority of these gullies are drained on the "open" system, a considerable quantity of sullage still finds its way into the old main drain through the storm water connections. This is unavoidable.

" To prevent this sullage finding its way into the open length of the old main drain between Bellasis Bridge and Love Grove, sluices have been provided at the point where the covered portion of the drain terminates and the open drain begins. These are closed in the fair season, that is from about the first week in October to the first week in June.

" The sullage which would otherwise accumulate at this point is allowed to flow through a penstock into the main ovoid sewer.

"In the monsoon, when, in the ordinary way the old main drain brings all the storm water from the heart of the City, the penstock between the old main drain and the sewer is kept permanently closed and the large sluices are opened, thus allowing the storm water and dilute sullage to flow in the open stretch of the old main drain.

"It was found that above the penstock referred to there was about a 2 inch space but this has recently been closed up as much as possible so that now, when the penstock is closed, there is practically no communication between the old main drain and the sewer.

" There is a low level connection of small diameter near Love Grove between the drain and the sewer. The object of this is to drain off from the open drain, at the end of the monsoon, any water that is left in the drain which is at too low a level to flow into the sea.

"All the gullies, as I have stated, have open drains. They also have jump weirs. When the gullies are flushed, quantities of foul water goes over the jump weirs and thus enter the storm water drains.

"Also there are many paved spaces such as in stables, open to the sky and connected to the storm drains. Sullage is frequently passed down the drains leading therefrom. We shall never succeed in keeping all sullage out of storm drains any more than we can keep storm water out of the sewers."

" An open Storm Water Reservoir is provided extending from the Hornby Vellard to Haines Road and from Clerk Road to Worli—about 200 acres. This is a lake of sewage and storm water stagnating during six months of the year when millions of mosquitoes breed.

" An open storm water drain runs from Bellasis Bridge to Love Grove and discharges into the storm water reservoir and is not only a stinking cesspit but is a living mass of mosquito larvæ. The open storm water channel from Haines Road to Worli is practically a sewer and similarly a breeding place for mosquitoes.

" The storm water drains in the City receive night-soil from the over-flowing privies and this is discharged into the open drain or into the reservoir.

" A new ovoid sewer was laid from Bellasis Road to Love Grove to relieve the surcharged sewers of the city.

" Even in this monsoon, the lightest rainfall known to the present generation, the sewers are surcharged ; many of them even in dry weather.

" The whole of the open drain from Bellasis Road to Love Grove and the storm water reservoir is an elongated cesspit and is a living mass of mosquito larvæ.

" Now, if the Corporation wish to undertake a sanitary work which will benefit the City, this is the opportunity.

" A proposal to divert the open drain to the Worli Channel and to provide pumps at Worli was sent by the Drainage Engineer to the Executive Engineer some three or four years ago and nothing has been done.

" The matter is so urgent and affects so many interests that I would suggest that Government be approached and asked to assist financially and otherwise in getting rid of one of the most insanitary features in the City.

No. H19/A/26-7-1918 :—

" But we are only playing with this question the nuisance from depositing the town sweepings is nothing to the nuisance caused by the open drain and storm water reservoir which is breeding millions of mosquitoes, Stegomyia, Culex and Anopheles.

" Something should be done to tackle this question, as I am getting many complaints about mosquitoes on Cumballa Hill and neighbourhood. The Municipal Commissioner is well acquainted with the whole matter, which, if not dealt with, will cause a serious outcry from the public and rightly too. The only solution is (1) to fill in with earth along Clerk Road and Hornby Vellard for 100 yards deep ; (2) divert the Bellasis Road open drain into the storm water channel and pump the water into the Sea.

"This may be a big proposition but not too big, if it will get rid of this awful nuisance.

" The Turf Club is prepared to meet the Municipality, and I think it would be a good opportunity to make some arrangements with them to solve a problem which does not seem to promise any hope of solution at the present rate of progress."

Improvement of Insanitary Areas.

Numerous reports were submitted by me from time to time during the last fifteen years on this very important subject. I would refer only to two of the more recent ones :—

(1) No. 1506 of 13-4-1919.

It is now 14 years since the Commissioner represented that the conditions of certain insanitary areas in the City required improving.

The representations were considered by the Corporation and forwarded by the Municipal Commissioner to the Improvement Trust for action.

The present position is :—

1. That the majority of those areas which were represented in 1903 as insanitary remain the same or worse.
2. That in addition to those, many others exist and are growing worse.
3. That the population has greatly increased since 1901 and the wealth and prosperity of the City has materially increased.

Who is to blame?

Government.	Improvement Trust.	Corporation.
Government created the Improvement Trust and laid down certain duties while retaining powers of control should these duties be not carried out—See Sec. 23 (A) Improvement Trust Act. In 1913 the Improvement Trust arranged with Government to modify the Sec. 23 which completely abrogated the powers of control: Section 23A was added giving the Local Government further powers of control in default. The Government of India contributed Rs. 50 lakhs for the purpose of improvement schemes.. and the Bombay Government a grant of 4 lakhs—see Press Note dated 20th May 1913.	Neither has the Improvement Trust carried out its duties under these Sections nor has the Government utilised the powers of control given in those Sections.	In 1901 Mr. Harvey represented that the Acts and Bye-laws were defective and made suggestions for their amendment; out of those suggestions the Bye-laws dealing with the height of buildings, height of rooms, area of rooms, sites for privies and water-closets and spaces around water-closets, abatement of overcrowding, &c., have been adopted. But the important suggestions regarding the exterior and interior open spaces around buildings have not been carried out. The insanitary conditions of areas and houses caused by the absence of light and ventilation still remain and the only Section of the Municipal Act dealing with insanitary houses is Section 378 which is wholly inadequate to make any substantial progress. A note made by me to the "Light and Air Committee" (appointed to consider this question) which I attach contains a history of the position. The Corporation was in default for not obtaining powers to insist on the improvement of insanitary conditions of those areas while contributing a large sum yearly to the expenses of the Improvement Trust.

Chapter XX of the Bombay Municipal Act, 1888, Section 518, gives Government power to insist on the Corporation carrying out certain duties under Section 61 (*d*) and (*g*) which read as follows:—

(*d*) The reclamation of unhealthy localities.

(*g*) Measures for the prevention and checking of dangerous diseases.

It does not require a stretch of the imaginations to consider that under either of these sub-Sections the Local Government could take action.

Or that there are many small insanitary localities which could be reclaimed or that under those Sections the conditions of these localities are dangerous to health.

The Government have acknowledged it
" Improvement Trust have " "
" Corporation " "

How then is to be found the *modus vivendi* for the helpless thousands who live there and a *modus operandi* of Government, the Corporation and the Improvement Trust ?

In the direction of improving these slums, there is a dead-lock between all these authorities.

The Improvement Trust do nothing because it would be a financial loss.

The Corporation do nothing because they say it is the duty of the Improvement Trust and they have no powers and will not ask for the extra powers while the Improvement Trust is in operation.

Government have the power to insist on both the Authorities carrying out their obligations to the City and those thousands who suffer; while these authorities whose duty it is to carry out these obligations indirectly accuse the large employers of labour and the owners of property for not providing better accommodation for their employees, although ample powers are given to the Improvement Trust.

In my Report in 1903, I suggested that rooms for 100,000, people should be provided for the working classes pending the improvement of insanitary areas.

The suggestion was not taken up because it was stated that the expenditure would be one crore of Rupees ; other schemes were developed. Large expensive chawls have been built by the City Improvement Trust which have very little effect on the existing conditions. 50 lakhs have been provided by the Government of India for improvement schemes and 4 lakhs paid by the Government of Bombay while the Corporation during that time has contributed a crore of Rupees to the Improvement Trust but still these filthy areas remain.

Had my proposal been carried out, then a different tale would be told to-day of the condition of the helpless thousands and the health of the City.

10 lakhs per annum would have created a large improvement in these areas while now it may take 20 lakhs per annum to have the same effect.

This may be ancient history but it is nevertheless true. How many times has the Chairman of the Improvement Trust said he was now prepared to take up the improvement of small areas and how many times have we reported on them ; but nothing is done and the dead-lock remains.

The solution.

It must be accepted as a fact that the laws and bye-laws of the Municipal Act, relating to improvement of insanitary areas, are defective. The Improvement Trust have powers and authority to deal with the subject, and the Government have power to insist on the Improvement Trust fulfilling its obligations if a representation is made.

It will be accepted that the delay in adopting these regulations has increased the burden enormously.

Government and the Improvement Trust and the Corporation realise that this work is urgently necessary if we are to take these working classes out of the slough of filth and degradation that now surround them, and each of these authorities is anxious to do this if a way be found.

In England and other countries, acts have been passed and bye-laws adopted for this purpose.

Procedure :—

(i) To amend the Municipal Act on the lines suggested and to provide ways and means and make it obligatory on the Municipality to carry them into effect.

(ii) To insist on the observancy of Section 23A of the Improvement Trust Act.

To make any impression by working under the existing Municipal Act will take years.

This has been pointed out time after time. The Health Department and the Engineering Department have already more than they can do, and a separate staff with a well trained experienced Sanitary Officer and Engineer is necessary to enquire into the condition of every house in every area which is considered insanitary and bring forward a practicable proposal to remedy defects.

The staff already exists in the Improvement Trust except the Sanitary Official.

The question to be settled is.—Is it a duty of the Improvement Trust or of the Corporation or Government ?

Undoubtedly as the law is at present, the duty lies with the Improvement Trust : just as much as it is the duty of the Corporation to adopt bye-laws to deal with existing conditions and prevent the still further deterioration which is going on under the existing Acts and By-laws.

My proposal is that Government :—

(1) Amend the Act and Bye-laws of the Municipality and divert the Municipal contribution to the Improvement Trust for improving the insanitary areas on an equitable basis of compensation ;

(2) Place at the disposal of the Corporation the staff which is now working under the Improvement Trust ;

(3) That when the schemes drawn up by the Improvement Trust which have been approved are in a fair way of completion, the Improvement Trust should cease and the Corporation take over the assets and liabilities of the Improvement Trust under a Special Officer under the control of Government and continue the development of Bombay on the lines found suitable to the conditions of the present and future.

Note of 28-5-1917.

Insanitary Houses and Areas in Bombay—The amendment of the Municipal Act and the adoption of By-laws necessary to remedy the same.

The question has been dealt with on many previous occasions. The Municipal Commissioner now asks that a definite standard be laid down as to the minimum requirements necessary to render houses condemned as U. H. H. fit for human habitation and to prevent the creation of further insanitary areas ; although this is rather a question for the architect or engineer, I have already attempted it in the several reports I have made on the subject.

In a memorandum which I attached to the note referred to, and which was laid before the Committee appointed by Government to consider this question and which was also sent to the Municipal Commissioner and the Corporation, I think it was made fairly plain what was required to remedy the existing conditions of insanitary houses and areas and also to prevent their growing worse and there is little left to be said what has not already been said many times before.

The question put by the Municipal Commissioner is :—

> What are the minimum requirements necessary to make those houses and areas which are unfit for human habitation or insanitary fit for habitation and to prevent the creation of further insanitary conditions.

Any house, room, passage, staircase, cook-room or part of a house used for habitation which is not sufficiently lighted and ventilated, which abuts on to an open drain, gully or passage in which exists a basket privy, latrine or urinal, or which is so overcrowded as to be a nuisance, which is damp or has defective walls and floors, is dirty and harbours vermin, and in which there is not sufficient bath and water-closet accommodation, shall be declared U.H.H.

It is not merely necessary that living rooms should be adequately lighted (some attempt to secure this result has been made in the past for obvious reasons), but staircases, bedrooms, and indeed any part of the house which may afford opportunity for the communication of impurity in the form of dust to the atmosphere of the dwelling, should also, as far as practicable, be exposed to the action of light. Just as it is necessary to avoid dark enclosures and corners, so it is important that circulation of air should, as far as possible, be secured, and that completely circumscribed "shafts" and "wells" which would permit of the collection of stagnant columns of air, and such arrangement of tenements as would interfere with the proper renewal and interchange of the air of the rooms, should be avoided.

In the past but little attention was paid to such questions ; it was common to form cul-de-sac dead-ends which prevented air movement, and led to more or less stagnation of the air in front of the houses approached from the cul-de-sac.

Bye-law 41 should read:—

"Sufficiently ventilated and lighted" shall mean that:—

(*a*) The whole of at least one side of every room should be an external wall abutting on the open air or should abut on an interior open space.

(*b*) Such external wall when situated at the side of the building should abut on an open space of not less than ten feet in width extending along the whole length of the wall and belonging exclusively to the building. In this space no open drain except for rain water should be allowed.

(*c*) Every interior open space referred to in (*a*) above should have a minimum superficial area equal to 1/4 of the aggregate floor area of all the rooms abutting thereon and a minimum width of eight feet, belonging to each house and should be open to the sky and free from any erections or encroachments of any kind. This interior open space or chowk as it is termed shall be so constructed as to provide a free current of air from below which should have sufficient access to the external air and shall not contain a privy, an open drain, or a washing place and a dumping place for filth as is the present practice. The height of any face of a dwelling abutting on such open space should not exceed twice the width of the open space measured from such face to the opposite side.

* Note:—Should the configuration of the building or area not admit of this being done so as to provide the necessary light and ventilation there,

(*d*) At the rear of the building there should be an open space exclusively belonging thereto of an aggregate area of not less than 150 sq. feet, of at least ten feet in width, free from any erection, and extending laterally throughout the entire width of the building. The minimum distance from every part of such building to the boundary of any land or premises immediately opposite or adjoining thereto should be:—

If the height of the building be			15 ft.....	15 ft.
"	"	"	25 ft.....	20 ft.
"	"	"	35 ft.....	25 ft.
			or over.	

That on the representation by the Health Officer and the Executive Engineer, that any such house, room, passage or part of a house is defective in these respects, the house shall be deemed to be U. H. H. under Section 378 of the Municipal Act and that action be taken to close it until it is put in such a condition as will satisfy these requirements.

This deals with individual houses.

With regard to "obstructive buildings":—

Any building

(*a*) which is so dangerous or injurious to health as to be unfit for human habitation,

(*b*) which stops ventilation, or otherwise conduces to make other buildings injurious to health,

(*c*) which prevents proper measures from being carried into effect for remedying any nuisance injurious to health

should be treated as an "obstructive building" and action taken for its removal.

In order to improve the insanitary areas of the City, "obstructive buildings" must be dealt with. This can be done by acquiring and demolishing and re-building individual houses or by making small improvement schemes.

In any event, I am strongly of opinion, whether we are dealing with individual houses or parts of houses or small improvement schemes, that it will be necessary to pay compensation.

For years the insanitary condition has been represented to the Corporation and proposals made for adopting bye-laws so as to reduce the existing conditions or prevent them growing worse. Although the bye-laws have been amended from time to time, number of houses have been erected which will become insanitary areas, although conforming with those bye-laws; whereas had more stringent and sanitary regulations been enforced, this would not have happened.

It is equitable therefore, in demolishing houses which are U. H. H. or areas which are insanitary owing to being erected under defective bye-laws, that compensation should be paid and I suggest that this be done on the following scale, modified to suit the conditions obtaining in the City :—

(1) Compensation shall be based upon the fair market value at the time of valuation without any additional allowance in respect of compulsory purchase;

(2) In framing the estimate, due regard is to be had to the nature and condition of the property and the probable duration of the buildings in their existing state.

(3) Deductions are also to be made for existing nuisances:—

(*a*) For an enhanced value by being used for illegal purposes or owing to overcrowding;

(*b*) For the bad state of repair in which the premises are found;

(*c*) The property not being reasonably capable of being made fit for habitation.

Conclusion.

In my Annual Report for 1914 I reviewed the work done during the preceding fifteen years and mentioned the progress made. I pointed out that the cost of the Health Department was *pro rata* of the population and the increased expansion of the City less than in 1901 and that the amount spent on Public Health Administration of the City should be considerably increased.

I showed at page 75 of that Report what progress had been made and in what direction no progress had been made. I have constantly pointed out during the past four years that progress was at a standstill and made it clear that it was not all on account of the war. I have given extracts from my reports and letters to the Municipal Commissioner and the Corporation pointing out how little was being done for the public health of the City and in what directions progress is necessary ; and that although proposals for improvement have been made, approved and sanctioned, they have not been carried out and gave my reasons why they have been delayed and enumerated 23 items of necessary work.

It may be said that I should have pressed these questions on the notice of the Corporation. The answer to that is that in my Annual Reports I brought these matters forward year after year and that this is the only means the Executive Health Officer has of bringing questions of public health to the notice of the Corporation if his proposals are not forwarded to that body.

In England the Health Officer makes proposals for improvement and the Corporation deal with them through the Public Health Committee after consulting the Health Officer personally and going into the questions. Here in Bombay the Health Officer is called upon to report on any subject any member of the Corporation wishes to bring forward. After making exhaustive reports, which are either recorded or sent to Committee, nothing more is heard of them. While the Health Officer brings forward suggestions for improvements, it depends on the Municipal Commissioner to send them to the Corporation or not ; whether he reports on the proposals himself or sends the *verbatim* reports of the Health Officer depends upon the view the Municipal Commissioner takes of the importance of the improvement of public health or prefers some other more visible and tangible return for the money spent.

I have pointed out from time to time that the Health Department has been starved both financially and sanitarily and that no real improvement in the health conditions of the City can be made until a larger view is taken of the situation.

I have also said that by constantly hammering at the want of financial aid and co-operation on the part of the executive, it might appear that I am impatient and unnecessarily complain. I have also stated that I have no grievance beyond want of progress in

the sanitation of the City and that much more could have been done, had my proposals been carried out, and the health of the City been considered of more importance.

Mr. P. W. Monie, Municipal Commissioner, during the 2½ years he has held that post, has personally gone into every detail of the working of the Municipality and knows thoroughly the requirements of each Department and will press for improvements now that the conditions are more favourable and my successor will have the advantage of the Commissioner's knowledge.

The spade work has been done and the seed has been sown and it will I trust not be long before the Corporation of the City will press forward these improvements and give the people the fruits of our labour.

Cost of the Department.

In 1901-02	the rateable value of the City was	Rs.	2,86,41,750
„ „	the income was	„	77,66,729
„ „	the expenditure was	„	82,26,647

The amount spent on the Health Department was 23 lakhs exclusive of Market and Slaughter House but including Plague or 28 per cent. of the total expenditure.

In 1913-14	the rateable value of the City was	Rs.	5,07,00,000
„ „	the income was	„	1,29,00,000
„ „	the expenditure was...	„	1,21,00,000

The amount spent on Health Department was 18 per cent. of total expenditure including increase of pay to labour staff and including Plague and Malaria, &c.

In 1919-20	the rateable value of the City is	Rs.	7,54,32,353
„ „	the income is	„	1,73,65,000
„ „	the expenditure is	„	1,79,32,592

The amount to be spent on the Health Department is 17 per cent. of the total expenditure. This includes, Plague, Malaria, &c., and increase of pay to labour staff, increase in feed of bullocks, and higher prices all round.

It will thus be seen that while the rateable value and the income of the City have more than doubled and the expansion of the City both in population and trade and industry has increased over 50 per cent., the amount spent in the Health Department has been reduced by 11 per cent. instead of increasing by 50 per cent. The population in 1901 was 7,76,000; at present it is over 12,00,000.

Unless a larger view of the importance of the Public Health Administration of the City is taken, it is hopeless to expect any improvement.

Not only has there been no increase in the supervising staff and labour staff but the amount expended on sanitary works is almost negligible.

The amount spent on labour alone is 11-12 lakhs per annum ; there is one Conservancy Superintendent on Rs. 500 per mensem.

ork of the Department—Appreciation.

During the year, my Senior Assistant, Dr. B. K. Goldsmith, who was on combined leave out of India from the 9th March 1917, resumed duty on 11th September 1918 and Captain E. S. Phipson, D.S.O., I.M.S., who was acting for him, reverted to Government service. Dr. Goldsmith again proceeded on medical leave from the 2nd December.

My Junior Assistant, Dr. Sorab C. Hormusjee, was on privilege leave for one month from 1st July 1918 to 31st July 1918; he proceeded on medical leave from the 2nd December from which date Dr. K. B. Shroff acted as my Junior Assistant and gave me great assistance.

During the year Dr. B. B. Broacha, L.R.C.P. & S., volunteered his services to treat eye-complaints among the poor attending the Municipal Dispensaries and he was allowed to do so at each of the Dispensaries Nos. 5, 7 and 8 twice a week from 9 a.m. to 10 a.m. The total number of patients treated by him from the 25th February 1918 to the end of the year was 1,357. I am very pleased to record my appreciation of the honorary work done by Dr. Broacha and bring the work to the notice of the Municipal Commissioner and the Corporation.

Owing to the epidemics of Influenza, Cholera and Small-pox, the work at the Arthur Road Hospital was very onerous. Dr. Choksy was assisted by Dr. Nerurker and between them they competed very successfully against the worst epidemic Bombay has seen; the staff of the hospital was augmented and the work of every one from Medical Officer in charge and the nurses and the subordinate staff, &c., is deserving of great praise and I have suggested that some substantial recognition be made of their work.

The Municipal Laboratory has been busy. Dr. Nerurker acted for Dr. Joshi and much extra work was done owing to the Cholera epidemic.

The Malaria staff, now under the Deputy Health Officers, carried out their work very satisfactorily.

Dr. Nerurker, Superintendent of Vaccination, was relieved of the vaccination work in order to help Dr. Choksy and the Municipal Analyst, Dr. Sanzgiri, carried out the duties of the Superintendent of Vaccination satisfactorily.

The clerical work of the Head Office continued to increase and during the past year the work was exceptionally heavy. Mr. N. S. Kowshik, the Chief Clerk, was again the great stand-by as, owing to the absence of Dr. Goldsmith and Dr. Sorab, much extra work devolved upon him and in the preparation of the annual and quarterly reports, the Influenza and Cholera reports, I had to make on his time enormous demands which necessitated working long after the usual office hours. I cannot too strongly express my opinion of Mr. Kowshik's services to the Health Department.

Mr. Nagindas Jamnadas and the rest of the staff, especially the Registration Branch, worked unceasingly and without complaint until the work began to tell on their health.

As this is my last report as Executive Health Officer, I should like to express my gratitude to all the officers and clerical and subordinate staff of the Public Health Department; they have done their task well and have stuck to their work loyally. I have expressed my appreciation of their labours in strong terms to the Municipal Commissioner and I trust that in the future they will receive some share of praise and recognition which they so thoroughly deserve.

PUBLIC HEALTH DEPARTMENT,
MUNICIPAL OFFICES,
Bombay, 24th April, 1919.

J. A. TURNER, M.D., D.P.H.,
Executive Health Officer.

Report of the Arthur Road Hospital for the year 1918.

I.—Administration.

1. I was in continuous charge, except during five weeks of privilege leave, when Dr. Nerurker acted for me. He also assisted me, as honorary assistant medical officer during the Influenza and Cholera epidemics. His help was extremely valuable; but for it, it would not have been possible for me to cope with the enormous amount of work incidental to two such epidemics in close succession. Hospital work was continuous throughout the twelve months as shown by the number of patients treated which was 3,322—a number, that has been exceeded but twice only during the course of the last 31 years,—in 1898, when there were 4,319 admissions and in 1900, 3,626. The combined work of both the Arthur Road and Maratha Hospitals in 1918 was however the heaviest of my service.

2. *The Staff.*—Considerable additions to the staff became necessary, during the Influenza epidemic. In addition to Dr. Nerurker, Dr. Miss Gulbai Medora, and Military assistant surgeon Quanbrough were appointed as assistant medical officers; similarly during the Cholera epidemic, Dr. Khare was appointed assistant medical officer. Great difficulty was experienced in securing the extra nursing and subordinate staff and eventually some District Nurses of the Health Department, of the Bombay Sanitary Association and of the Lady Willingdon Scheme were detailed for Hospital duty. There were thus 17 to 18 Nurses at work during the two epidemics; there was however room for many more had they been available. The subordinate staff was increased by three Hospital Assistants, two compounders, one clerk. The menial staff could not however be easily secured, but 45 ward attendants, 33 sweepers, 6 dhobies and 5 cooks were engaged.

3. The sudden, unexpected and unprecedented in-rush of patients could not be met by a simultaneous augmentation of the staff owing to the absence of any permanent organisation to meet such contingencies. During both the Influenza and Cholera epidemics, the difficulties in securing the extra staff were such as had never been encountered before, except during the early years of Plague. Whoever offered his services, trained or untrained, oftener the latter, had to be accepted and made the most of. In addition to the above, 23 members of the Hindoo Section of the St. John's Ambulance Corps who had received training in Home Nursing, etc., assisted the Nurses and the clerical staff.

4. *Adverse Criticism on Administration.*—Unfortunately however, the enormous difficulties we had during the Influenza epidemic were scarcely appreciated by those unconversant with them, nor were the limits of the available resources of the hospital recognised. It was expected that the Hospital should have suddenly and automatically expanded with the influx of patients with a complete and well trained staff; but, as pointed out above, there existed no such reserve from which the staff could have been so drawn upon to meet the emergent requirements. The hospital administration therefore came in for a good deal of unfounded and ill-formed criticism at the hands of laymen who failed to realise the difficulties that had to be contended against. The critics had never been inside an Infectious hospital at the height of an epidemic or at any other period during their life time. They came, they saw, and they criticised according to their predilictions or according to such hasty impressions as they could gather without any knowledge after seeking information from those as ignorant as themselves.

It was rather strange to contrast this sudden outburst of zeal with the complete and callous disregard of the hospital during a cholera epidemic of unprecedented magnitude within living memory, that took a larger toll of life in proportion to attacks as compared with influenza. Not one of the amateur critics so much as even entered the precincts of the Arthur Road Hospital.

5. It has been a matter of considerable regret to the present writer that his work and experience of 31 years in the administration of Infectious hospitals was overlooked and he was submitted to much undeserved obloquy. The unfortunate break down of his health, through influenza, contracted in the execution of his duties on two occasions, and the sudden and untimely death of his right-hand man, Resident Hospital Assistant, the late Mr. A. DeSilva, may have temporarily and partially disorganised the work of the hospital owing to the unforseen influx of patients. This was however completely ignored in apportioning unmerited blame, and that too, not on any important matters of administration or treatment of patients, but on minor details that fall within the scope of the duties of the Matron and not of the Administrative Medical Officer. Strangers went into the Hospital; did not apply to the proper parties for information, which they sought from the newly engaged ignorant servants and made capital out of what they imagined to be laxity of administration. Instead of help, all that was forthcoming, was ill-formed criticism.

II.—General Statistics.

6. The total number of patients admitted during the year was 3,322, as compared with 958, 1,864, 878 during the years 1917, 1916 and 1915 respectively. The maximum number of Small-pox patients remaining in hospital on any morning was 280, on the 17th March, and the largest number of admissions was 26 on the 5th March.

During the Influenza epidemic, the maximum was 257 on the 4th October with 76 admissions on that day, and lastly during the Cholera epidemic the maximum was 151 on the 31st December, the largest admissions were 39 on the 30th December.

The total number of Small-pox patients treated was 1,411. This number has been exceeded but once in the course of the last 32 years—in 1905 when there were 1,450 admissions. Heavy admissions also occurred in 1916, 1, 142 ; and 828 and 786 in 1908 and 1900 respectively. The admissions from Cholera were 497 and from Influenza 1,192.

7. The following table shows the details of admissions, deaths, recoveries and case mortality rate among the patients treated:—

Diseases.	Admissions.	Deaths.	Recoveries.	Case-mortality rate per cent.
Small-pox	1,411	327	1,084	23·1
Chicken-pox	70	.....	70	.....
Measles	20	1	19	5·0
Influenza	1,192	384	808	32·2
Cholera	497	283	214	56·9
Diphtheria	2	.....	2	.....
Scarlet Fever	1	.....	1	.....
Erysipelas	6	.....	6	.....
Relapsing Fever	1	.....	1	.....
Plague	2	.....	1	50·0
Observation cases	120	20	100	16·6
Total,	3,322	1,016	2,306	30·5

8. *Military Patients.*—The total number of military patients treated during the year was 89 as compared with 78 and 373 in 1917 and 1916 respectively. They comprised the following acute Infectious Diseases:—

Diseases.	Admissions.	Deaths.	Recoveries.	Case mortality rate per cent.
Small-pox	31	3	28	9·6
Chicken-pox	19	....	19	....
Measles	4	1	3	25·0
Erysipelas	2	....	2	....
Cholera	9	1	8	11·1
Scarlet Fever	1	....	1	....
Influenza	6	1	5	16·6
Cerebro-Spinal Meningitis	1	....	1	....
Observation cases	16	....	16	....
Total	89	6	83	6·7

The fees recoverable from Government for their treatment approximately amounted to Rs. 1,723-8 as compared with Rs. 2,179-8-0 and Rs. 5,886 in the years 1917 and 1916 respectively.

III.—Small-pox.

8. Early in the year Small-pox began to be in evidence ; there were 154 admissions in January ; February and March registered 406 and 400 respectively. A steady and continuous decline then set in with only 270 in April ; 110 in May, 35 in June and 20 in July. The accommodation of the Hospital was strained to the utmost and a large temporary ward for 60 beds was put up. By the time however it was ready, the epidemic began to decline ; it proved however, very useful during the epidemics of Influenza and Cholera. It was pointed out in the report for the year 1916, that during the course of 24 years, there had been 9 epidemics of Small-pox with admissions ranging from 430 to 1,450 in a year. The year 1917 might also be taken as an epidemic year as there were 429 admissions and the year under report had 1,411. The rate of case mortality was 23·1 per cent. as compared with 19·35 per cent. in 1916 and 22·5 per cent. in 1905. The admissions being 1,411, 1,142 and 1,450 respectively.

The Vaccinal Condition of Small-pox Patients.

9. There were 833 vaccinated patients as compared with 578 unvaccinated. All the persons had been vaccinated but once during infant life. The epidemic, though fairly severe, was not characterised by a high fatality inasmuch as the mortality rate in the vaccinated was 12·4 per cent. as compared with 38·5 per cent. among the unvaccinated : the former could be considerably reduced if the Goan so called vaccinated patients were to be excluded. The following statement compares the case mortality rate among the vaccinated and unvaccinated during the last 10 years :—

Year.	Vaccinated Patients.		Unvaccinated Patients.	
	Admissions.	Case Mortality rate per cent.	Admissions.	Case Mortality rate per cent.
1909	226	14·1	187	42·2
1910	399	18·0	286	41·9
1911	202	10·8	138	39·8
1912	426	16·9	232	40·5
1913	132	18·1	71	36·6
1914	182	19·2	101	33·6
1915	267	12·3	173	36·9
1916	801	13·7	341	32·3
1917	234	12·3	195	26·6
1918	833	12·4	578	38·5

The above figures once again fully demonstrate the efficacy of even one primary vaccination, in materially reducing the case mortality rate in after life. No patient who had undergone revaccination was admitted and only a few who were vaccinated in the stage of incubation. The disease ran a simultaneous course, mild or severe according to the time of vaccination. During the course of the last 31 years, that is since the year 1888, 12,265 small-pox patients have been treated at the Municipal Hospitals. They comprised 6,744 vaccinated and 5,521 unvaccinated cases. The mortality among the former was 14·9 per cent. as compared with 35·3 per cent. in the latter :—

Vaccinated Patients.				Unvaccinated Patients.			
Admissions.	Deaths.	Recoveries.	Case mortality rate per cent.	Admissions.	Deaths.	Recoveries.	Case mortality rate per cent.
6,744	1,009	5,735	14·9	5,525	1,956	3,569	35·3

THE VACCINAL CONDITION OF CHILDREN UNDER 10 YEARS OF AGE.

10. The vaccinal condition of children under 10 years of age exhibits a striking difference in favour of those vaccinated. The mortality rate amongst the unvaccinated was almost six times as heavy as amongst the vaccinated.

The following statement shows the various age periods and incidence of mortality :—

Periods.	Vaccinated.				Unvaccinated.			
	Nos.	Died.	Recovered.	Case-mortality rate per cent.	Nos.	Died.	Recovered.	Case-mortality rate per cent.
1 to 6 months	...	...	...	...	44	20	24	45·4
7 to 12 „	5	...	5	...	27	10	17	37·0
1 to 5 years	42	4	38	9·5	55	21	34	38·1
6 to 10 „	57	3	54	5·2	44	9	35	20·4
Total ...	104	7	97	6·7	170	60	110	35·2

11. It is high time some more stringent measures were adopted to prevent the influx of imperfectly vaccinated and unvaccinated persons into the City, as they become a distinct menace to its health. The unprotected who enter Bombay to earn their livelihood should be prevented from following their vocations unless they produce a certificate of successful vaccination after their arrival, and no employer should engage persons who do not possess one. All infants born up-country and brought to the City should be registered and vaccinated. Similarly all immigrants and others from Goa, who to all intents and purposes should be considered unvaccinated, should be vaccinated before they are allowed to disembark

IV.—CHOLERA.

12. The history of the Cholera epidemic of 1918-19 becomes broken up into two periods, owing to the exigencies of this report ; the first ending on 31st December and the second on 28th February 1919. The outbreak was the most severe that has been experienced in Bombay within the last 31 years. The admissions during three weeks in December alone—396—exceeded the total admissions of the epidemics of 1897 and 1906, 253 and 239 respectively. In other epidemics—those of 1912 and 1900,—there were 475 and 656 admissions, the epidemics having been prolonged over three months. In January and February 1919, there were 973 admissions, the total during this epidemic thus amounted to 1,369 patients within practically 9 weeks. The City was not however completely free from Cholera during the early part of the year, as 77 patients were treated in January. There was but a single admission in February and from June to September there were 22. There was one admission in November and 396 in December. Following, as it did, close upon the ravages of Influenza among people greatly debilitated and impoverished, it exacted a heavy toll of life, inasmuch as the hospital mortality rate was about 7 per cent. higher than in 1912.

13. The following statement compares the admissions and case mortality rates during the five previous epidemics :—

Epidemic years.	Admissions.	Case mortality rate per cent.
1897	253	71·1
1900	636	76·5
1906	239	64·4
1912	475	49·6
1918	497	56·9
1919 (January-June)	1016	52·8

The foregoing statement shows that the gradual improvement in the reduction of the fatality from the disease brought about through improved methods of treatment had a considerable set-back this year and the following figures confirm this :—

Periods.	Admissions.	Case mortality rate per cent.
1890-1904	1,041	78·0
1905-1909	687	53·0
1910-1912	547	47·0
1913-1916	327	32·0
1917	49	38·8
1918	497	56·9
1919 (Jan.—June.)	1,016	52·8

The above table demonstrates that there was a steady fall in the rate of case mortality from 78·0 to 32·7 per cent. Ignoring the few cases treated in 1917 with a slightly higher mortality, 38·8 per cent., the mortality rate increased to 56·9 per cent., indicating either greater virulence of the infection or lessened powers of resistance among the people. Out of 283 deaths, more than half occurred within 24 hours of admission ; they were semi-moribund on admission and their life was kept up by restorative treatment. Amongst these 283 deaths 46 occurred within 6 hours, 20 within 12 hours and 81 within 24 hours—in all 147 out of 283.

14. The treatment adopted was the same as in previous years. Owing to the absence of adequate facilities and want of skilled assistance and the unprecedented rush of patients, intravenous injections were out of the question and reliance was placed mainly upon the subcutaneous method, supplemented by the rectal. At the Cumballa War Hospital where the Military authorities came to our help in January, 265 patients were treated with 127 deaths. The case mortality was therefore 47·9 per cent., *i.e.*, only 5 per cent. lower than at Arthur Road. Almost all the patients there were treated exclusively by the intravenous method and yet in spite of that, the difference in favour of the intravenous method was just about 5·0 per cent. That the mortality during an epidemic of the virulence that visited Bombay should be expected to be very high has been testified to by Sir Leonard Rogers who in the course of a communication to Col. Prescott, the Officer Commanding Cumballa War Hospital, wrote that the results of treatment in an epidemic of this character could not be expected to be so very favourable as in his series of sporadic cases distributed over long periods. And that has been our experience in Bombay also, for during the four years—from 1913 to 1916—the rate of hospital mortality was brought down to as low as 32·7 per cent. among 327 sporadic cases all of whom were admitted in the stage of collapse, with suppression of urine.

It has been our experience in the past that racial differences have an important bearing in determining the total mortality from Cholera. During the epidemic of 1918-19 the racial mortality rate stood as follows :—

Races.	Admissions.	Deaths.	Recoveries.	Case mortality rate per cent.
Parsees	31	10	21	32·2
Europeans and Anglo-Indians	30	10	20	33·3
Christians	180	85	95	47·2
Mahomedans	141	72	69	51·0
Hindus	1,131	643	488	56·8
TOTAL ...	1,513	820	693	54·2

The differences noted above are further borne out by the aggregate results of 9½ years' work from 1910 to 1918-19 during which period 2,933 patients of various classes were treated with 1,486 deaths and 1,447 recoveries, the case mortality rate being 50·6 per cent. Distributed according to races the results stand as under :—

Races.	Admissions.	Deaths.	Recoveries.	Case mortality rate per cent.
Parsees	75	21	54	28·0
Europeans and Anglo-Indians ...	58	18	40	31·0
Christians	326	144	182	44·1
Mahomedans	364	173	191	47·5
Hindoos	2,105	1,126	979	53·4
Jews	5	4	1	75·0
TOTAL ...	2,933	1,486	1,447	50·6

The foregoing figures extending over a series of years and including 2 severe epidemics show distinctly that the racial element, owing to better social standing, better physical condition and consequently greater power of resistance, is an important factor to be taken cognisance of in estimating the mortality of Cholera, just as it is in Plague and Small-pox. No radical changes in the treatment were adopted. Dr. Nerurker and the present writer conducted the treatment on the lines already laid down in the previous reports with the results stated above. It might be added that potassium permanganate was not used as a routine method of treatment.

V.—INFLUENZA.

15. The epidemic of Influenza began very mildy about the end of June, supplying a few patients with hardly any severe respiratory complications. It was however towards the middle of September, when the present writer himself fell a victim to it, that the epidemic burst forth in its full virulence. The admissions in September were 247, in October 793, and in November 109 only. Admissions began to be very heavy towards the latter end of September reaching to the maximum of 76 on the 3rd October. The resources of the Hospital were thus once again strained to the utmost. But for the timely help of the Combined Labour Corps Hospital at Dadar, another hospital would have become absolutely necessary to deal with the enormous numbers afflicted. The fatality was 32·2 per cent. but nearly one-third of it occurred within 24 hours of admission. All these patients were brought to the Hospital practically in a dying condition, their life having been prolonged by a few hours through the help of restoratives. The class of patients admitted into the Hospital consisted mainly of domestic servants, labouring and coolie classes, mill-hands, etc., whose general condition appeared to be simply deplorable. In all the present writer's long experience of 31 years in dealing with Infectious Diseases, he had never come across so many cases of physical deterioration, men with haggard features, emaciated from semi-starvation and clothed literally in rags, as during this epidemic. Their condition was greatly aggravated by their continuing to work for 2 to 3 days after the onset of the disease, so that they naturally fell easy victims to it. The high prices and consequent dearness of food coupled with high rents had practically knocked all stamina out of them and it is not to be wondered at that the toll in hospital mortality was over 32 per cent. It is probable that the death-rate among those who died at their homes without any or adequate treatment must have been considerably greater. Although medical men in this city had considerable opportunities of treating the largest number of patients, the severer complications that came under notice at this Hospital, were not observed by them to any considerable extent.

16. *Types of Influenza.*—Two principal types were observed : (1) The purely febrile type of short duration with slight catarrhal symptoms, (2) and The septicæmic type with involvement of the respiratory, Gastro-Intestinal and Nervous systems.

I. The purely febrile type with slight catarrh was more prevalent in June and July and caused scarcely any fatality.

II. The septicæmic type was the most common during September-November, characterised by acute inflammatory conditions of the lungs and air passages, larynx, pharynx and naso-pharynx, Broncho-pneumonia, lobar pneumonia, and bronchiectasis with copious muco-purulent or almost purulent and fœtid sputum, with or without hæmorrhage. Many cases were characterised by considerable chronicity, the patients discharging large quantities of muco-purulent sputum for weeks.

There were frequent attacks of what may be called acute cardiac failure, or more appropriately cardio-vascular crises with feeble, almost imperceptible, low tension pulse, cold clammy perspiration and slow sighing respirations with total absence of dyspnœa. Such attacks recurred frequently, two to three times in the day and for three, four days in succession. Patients were however tided over these crises so long as dyspnœa did not co-exist. Many cases lingered on till the middle of the third week when they succumbed from progressive myo-cardial degeneration. Grave symptoms of toxæmia were observed, such as aphonia, aphasia, cerebral hæmorrhage and hemiplegia, facial paralysis, peripheral neuritis and paraplegia; ulcer of the cornea, inflammation of the middle ear, deafness, parotitis and occasionally suppurating arthritis were noted. Severe neuralgic pains in bones, joints and muscles were frequently complained of. In some cases marked tenderness of the lymphatics of the neck when the pharynx was involved was seen; sometimes general lymphocytosis in other parts of the body. Post pyrexial or afebrile delirum during convalescence, generally low muttering, but occasionally, fierce, maniacal and uncontrollable was also seen. Marasmus with the mental faculties rather dulled and feeble, ideas clouded and memory defective, came under observation. Hæmorrhages were frequently observed such as epistaxis, melæna, sometimes hæmoptysis but rarely hæmaturia. Kidney complications were present but they were not found to be so very grave and uræmic symptoms were not noted. Peri and endocarditis came frequently under notice and in a few cases perisplenitis was discovered. Intense prostration and weakness, out of all proportion to the attack, were the features most marked. In many cases there was association of malaria, latent or active. In a few septicæmic cases there existed with high fever vomiting, generally intermittent, diarrhœa, tympanites, hiccough and sometimes melæna. It is possible that some of these gastro-intestinal symptoms may have been due to irritation brought about by the so-called specifics against influenza that then flooded the market. With cerebral symptoms the patient lay in an almost comatose condition with stertorous breathing and a high temperature. Such cases sometimes lingered for a week and but died without recovering consciousness. The records of autopsies performed at the J. J. Hospital fully explained the causation of the above symptoms inasmuch as there were found hæmorrhages beneath the arachnoid, œdematous condition of the brain, increase of fluid in the ventricles with swollen convolutions of the brain. These pathological changes exhibit a marked similarity to those observed in Plague. Signs of meningeal irritation or actual meningitis were however practically absent.

17. No age was exempt; the age periods extended from infants in arms to advanced age up to 65 to 70 and over. The frail, the weakly and the half-starved were most susceptible to infection, but the better classes did not altogether escape. Those afflicted with pre-existing pulmonary troubles such as chronic bronchitis, emphysema, asthma, and phthisis were more prone to infection with higher fatality. The latter, it might be added, was considerably augmented by the moribund and semi-moribund patients picked up from the roadside.

18. The treatment of influenza was mainly symptomatic. No special drug or combination of drugs was found to cut short the disease. Creosote, guiacal, duotal, allylene quinine, salicine, salycilic acid, salol, all had their supporters. The disease however ran its allotted course, though the discomfort was mitigated. Injections of collodial iodine, as also Polyvalent vaccines appeared to do good in a few cases. The treatment therefore resolved itself into that of the most urgent symptoms and complications, to the support of the circulatory system and to keeping up the strength of the patient by suitable measures. It is true that now and again a particular line of treatment appeared to be beneficial, but further observations showed its inutility in all cases.

19. This visitation was unprecedented in the annals of Infectious Diseases in Bombay and India. It has carried away within a few months more than six million people, that is almost half the total mortality from Plague in 20 years.

In its rapidity of spread, the enormous number of its victims and its total fatality in India, Influenza reached a virulence before which even plague with all its horrors fades into insignificance. It is a question whether in such a rapidly spreading disease, any prophylactic measures such as vaccines could be applied sufficiently early, in sufficient number and on a sufficiently large scale in order to prevent its spread. Looking however to its brief period of inoculation, and its great wave like rapidity of spread over a whole continent like India, it does not appear that preventive measures however efficacious could be applied with any material success. Although the epidemic has declined, the disease has not yet completely disappeared from Bombay, inasmuch as a few sporadic cases still continue to come under observation.

VI.—The Arthur Road Hospital as an Infectious Diseases Hospital.

20. The Arthur Road Hospital has been the only Infectious Diseases Hospital in Bombay. It has seen an enormous amount of continuous work since 1892. Previous to this, an Infectious Diseases Hospital was located at Grant Road opposite the Northbrook Garden on the site of the present Municipal stables. Long before the outbreak of Plague

in 1896, as also subsequent to it, this hospital was maintained by the Corporation under protest, as it was of opinion that its liability under the Municipal Act of 1888 was limited to the upkeep of such a hospital during the prevalence of epidemics only and not continuously and that it was incumbent upon Government to make adequate provision for the treatment of sporadic cases of Infectious Diseases. This led to a curious sequel in the annals of the Corporation. In 1891 the Hospital at Grant Road was closed on the termination of an epidemic. The Government of Bombay asked the Corporation to keep it open, but it declined. Thereupon Government conducted it for some months and subsequently presented a bill to the Corporation, which it refused to pay. Government then exercised its right to enforce what was called the "bludgeon clause" of the Municipal Act and withdrew the amount claimed by it from the Municipal Treasury without the sanction of the Corporation. On the outbreak of an epidemic of Small-pox in 1892, the Hospital was, however, re-opened at Arthur Road on 6th February, from which date it has been continuously maintained. In view of the above circumstances, no structural additions were made to the institution, which was originally put up, not as an hospital, but as a refuge for famine immigrants, who flocked into Bombay during the severe famine of 1876-77. It consisted of three open permanent sheds with earthen floors and thatched straw-roofs, located in a practically bare and treeless compound, and four blocks of small domed-roof out-houses that still exist in their primitive condition. The former were provided with permanent flooring, boarded ceilings and tiled roofs after the outbreak of Plague. Subsequent to the settlement of the Police charges between the Corporation and Government, pucca walls, gas fittings, etc., were put in, but the principal buildings remain the same. All the enormous amount of work has been hitherto conducted in temporary bamboo and cadjan wards, that have served their time, but are no longer suitable nor creditable to a city of the extent and importance of Bombay. The only pucca-built additions since 1892, have been one block of quarters for the accommodation of 2 nurses, and one office room and dispensary. In 1908, the executors of the late Mr. Jamnadass Laloobhai offered to the Corporation, the sum of Rs. 20,000 for a small-pox ward in memory of his daughter: This was accepted and thus a permanent ward of 30 beds was added to the institution. There is no doubt that the perennial existence of the temporary sheds, though cool and comfortable during the dry season, was to some extent responsible for the far from flattering comments made about the hospital in the press from time to time. This state of affairs has continued up to the present day. It could have been remedied earlier, had the work of the European Section of the Hospital and the remodelling of the Indian Section sanctioned by the Corporation in 1914-15, for the total outlay of over 6 lakhs of rupees, been taken in hand. Owing to the war, the project had to be postponed. Consequently, the hospital has been hitherto maintained on the bare maintenance grant sanctioned for the treatment of patients, and both in buildings and equipment it lags behind the times. It is to be hoped, however, that after peace has been signed and the rates go down, the work would be seriously taken in hand and completed without any unnecessary delay.

21. Much capital has been made out of the fact that a Bacteriological Laboratory has not been hitherto provided at the hospital. It is not however known that in the early years of Plague, 1899-1902, there existed a special Municipal Laboratory at Government House, Parel, for the preparation of Lustig's Serum, where all the bacteriological work of the Arthur Road Hospital was done. Subsequently, owing to the kindness and help of the late Major-General Bannerman and Col. Liston, all such work of the Arthur Road and Maratha Hospitals has been done at the Parel Laboratory free of charge. And more recently, specially during the prevalence of Cholera, the Municipal Laboratory has supplemented the work of the Parel Laboratory. Clinical and bacteriological work has been thus conducted in close co-operation, with mutual benefit to the hospital and the laboratory. And lastly the Plague Research Commission conducted its study on the bacteriology of plague and serum treatment during five epidemic seasons in association with the Maratha Hospital and the Parel Laboratory. But for such assistance many obscure points in the pathology and bacteriology of some of the infectious diseases would have still remained unsolved.

22. Since 1888 to 1918, that is, during the course of the last 31 years, there has not been a single year when Small-pox has not been prevalent more or less and similarly also Chicken-pox and Measles. Cholera has however varied greatly since 1890. The severe epidemics have been already referred to under Cholera. The previous reports have dealt fully with all the epidemics. To summarise the work of this Hospital, it would suffice to state that 12,246 cases of Small-pox, 1,880 of Chicken-pox, 1,152 of Measles and 3,371 cases of Cholera have been treated. On the outbreak of Plague in September 1896 and during the 5 years following, the total number of Plague patients treated at the Arthur Road Hospital was 6,382. This hospital was the only general plague hospital from September 1896 to February 1897. In the monsoon of 1897, Relapsing Fever made its appearance and it continued to prevail more or less up to 1909. The admissions were very heavy from 1897 to 1902 and again from 1905 to 1907, the total number of patients admitted was 7,900. The Influenza outbreak of 1918 was responsible for 1,192 admissions. In addition to the above infectious diseases, others such as mumps, whooping-cough, erysipelas, jiggre and other general diseases have from time to time severely taxed the resources of the institution :—

Statement showing the class and number of patients treated at the Grant Road Small-Pox Hospital 1888-1891, Arthur Road Infectious Diseases Hospital 1891-1918 and Maratha Plague Hospital 1902-1918.

Diseases.	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	Total.
Small-Pox	45	102	55	25	219	89	158	139	303	53	28	215	786	94	162	673	476	1,450	308	102	828	413	685	340	658	203	283	440	1,142	429	1,508	12,311
Chicken-Pox ..	..	..	20	30	25	47	34	26	56	16	56	25	91	71	69	75	40	52	48	27	84	56	43	60	53	140	34	106	178	118	200	1,880
Measles	..	..	3	10	20	4	31	6	8	17	13	42	59	5	41	78	32	80	85	3	67	6	105	87	51	23	71	44	64	81	41	1,152
Cholera	..	..	27	12	72	74	91	28	98	256	6	2	633	26	10	4	85	9	239	101	34	138	36	39	475	52	137	16	122	42	507	3,371
Plague	..	..	..	..	..	..	..	..	297	1,270	2,187	1,387	812	429	1,284	1,395	1,106	1,398	965	621	618	608	440	365	238	392	440	135	411	476	335	17,809
Relapsing Fever ..	..	..	..	..	..	..	..	..	..	464	1,581	988	1,099	799	486	275	139	424	813	380	284	123	41	1	2	1	1	..	2	7	24	7,334
Mumps	..	..	..	..	..	..	..	..	4	2	..	..	..	..	4	4	4	4	22	6	2	9	2	76	12	20	6	22	162	171	236	768
Whooping Cough ..	..	..	..	..	..	..	..	..	..	4	2	..	..	..	..	..	..	3	..	3	1	..	4	15	10	9	2	9	15	..	..	21	93
Erysipelas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22	14	14	26	31	28	33	24	13	22	8	11	7	10	6	259
Typhoid Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	7	6	2	8	11	1	3	2	3	4	1	..	..	..	..	53
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Cerebro-Spinal Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	7	6	4	5	8	..	34
Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	2
Diphtheria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	2	6
Chigger	..	..	..	..	.	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	334	1	..	349
Influenza	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,520	1,520
General Diseases ..	..	..	18	14	..	..	8	6	9	868	446	161	146	200	464	349	343	228	230	245	332	306	327	359	327	355	286	228	326	401	201	7,083
Total ..	45	102	123	91	336	214	322	205	775	2,950	4,319	2,820	3,626	1,624	2,520	2,958	2,247	3,615	2,639	1,525	2,191	1,692	1,730	1,563	1,845	1,221	1,262	1,037	2,755	1,747	4,531	54,640

Between the Arthur Road and Maratha Hospitals, the latter of which I took charge of in 1902, the total number of patients suffering from Infectious Diseases of all kinds treated was 47,450, in addition to 7,083 patients suffering from General diseases, who came in as observation cases, or as suspects or contacts of some of the above affections. Most of the above work for nearly 20 years has been done single handed without the help of even a single qualified medical assistant, except, during the small-pox epidemic of 1905 when one was temporarily appointed. During the Influenza and Cholera epidemics of 1918 more help came to be provided as above referred to. The annexed table shows at a glance the details of the Infectious work in Bombay from year to year from 1888-1918.

23. It has been a unique experience to have been associated with infectious work of this nature for over 3 decades amidst multifarious difficulties incidental to epidemics, where there has been going on a constant struggle between the forces of civilization, as shown by practical sanitary measures and western medical treatment on the one hand, and ignorance, gross apathy, prejudice and superstition on the other, amongst the illiterate masses, when human life, disease and death are concerned. The extent to which human callousness and indifference could reach, could not be better illustrated than by the sad experience of the 22 epidemics of Plague with all their attendant horrors, especially in the earlier visitations and the heavy toll of life they exacted. In spite of it all, there exists even upto this day, a reluctance amongst the people,—not the illiterate alone, to accept in good faith the diagnosis of Plague made by their medical attendant. Even now, they fail to realise the extreme gravity of the disease, trifle with the patient's life, waste precious time, obstruct treatment; and when the inevitable happens, they blame, not themselves, but the unfortunate and perhaps too yielding doctor. It is all very well to talk of popularizing the Infectious Diseases Hospitals when there prevails a rooted belief—though a wrong one—that every patient that goes there is doomed to die, in face of the fact that thousands have left their portals completely restored in body and mind. It is hopeless to expect, constituted as is the Indian mind, to carry any conviction to it in this regard and no amount of proof, and even actual demonstrations could convince those who refuse to be convinced. It is only by a long process of education of the masses, general and sanitary and their co-operation that would in the long run popularise those hospitals and remove from them the undeserved stigma of dying houses—which they practically are, on account of the heavy mortality. That could be reduced only by the prompt recognition of the gravity of illness and equally prompt resort to them.

Help of Voluntary Agencies.

24. In the history of the control of epidemics in Bombay, philanthropic voluntary agencies came to the help of the Municipality in the actual work of taking medical relief to the homes of the poor for the first time in 1918 during the Influenza epidemic. For, no hospitals however large, or numerous could possibly have accommodated all the sufferers. The work of these agencies being entirely novel and without previous experience could not therefore be organised on a systematic basis. The St. John's Ambulance Corps with its various sections, Hindu, Parsee, Cosmopolitan, the Social Service League, the Humanitarian League and other sectional associations, gathered funds and did all they could to succour the needy and the helpless. It therefore struck me that Bombay required some sort of a permanent organisation for the purpose. I therefore suggested at the meeting of the Bombay Medical Union, specially convened to discuss the Influenza epidemic, the outlines of a scheme to be worked out in co-operation between the Department of public health, the Bombay Sanitary Association and the various philanthropic agencies above referred to. The scheme that I suggested was to organise a central body or Medical Relief Association with representatives of all the agencies concerned, who should combine and draw up a plan of campaign for future occasions. The City to be subdivided into 100, 150 or even 200 small compact units, each unit to consist of about six prominent men residing or owning property in the area, with a member of the Corporation and two or three medical men, two nurses and from 5 to 6 voluntary workers. The *modus operandi* would be:—on receiving intimation from the Health or District Officer of any increase in sickness or mortality in a particular unit, the unit of that section to be mobilised at once; domiciliary visits, medicines and food to be conveyed to the sick, early removal to the hospital suggested if practicable. In case of an extensive epidemic, other units to be similarly mobilised according to its spread. There should be created a Central Bureau with a paid secretary and staff which should be in constant touch with the sanitary pulse of the city, always on the alert and always ready to meet any and every emergency. It was further suggested that the efficiency of such units could be tested in normal times by test mobilisations. This organization is to be permanent and working in co-ordination with the Health Departments. The creation of a Central body is necessary to co-ordinate the work of various sections, to prevent overlapping and waste of resources by systematic work and complete co-operation. The above scheme I placed before the Union as a personal suggestion leaving the decision of its practicability to those concerned. It is however a source of gratification to me that the Medical Relief Committee of the

Municipal Corporation have considered and approved of such a scheme for medical relief. It is to be hoped that it would be long before the services of such an organisation would be required and that Bombay which has passed through the troublous times of 1918 would be spared the visitations of three successive epidemics in a single year.

25. I cannot conclude this brief review of my work at the Arthur Road Hospital without placing on record the deep sense of loss that the Hospital has sustained through the untimely death of the Resident Hospital Assistant, Mr. A. DeSilva, who fell a victim to Influenza. For 19 years, he worked unceasingly, day and night; his extreme kindness to patients, his zeal and interest in his work were valuable assets of the Hospital. It is a matter of great regret that the services of one, who lost his life at the post of duty, have not been adequately recognised, and his family provided for any better, than that of an ordinary clerk, who dies a natural death whilst in service.

BOMBAY, ARTHUR ROAD HOSPITAL,
10*th April* 1919.

N. H. CHOKSY, M.D., F.C.P.S.,
Assistant Health Officer.

Report of the Maratha Plague Hospital for the year 1918.

I.—Administration.

I was in continuous charge of the hospital throughout the year except during five weeks of privilege leave when Dr. J. S. Nerurker acted for me.

2. There were no changes in the nursing staff; the post of the third nurse that was vacant was filled up for six months during the epidemic season by engaging a temporary nurse.

3. The hospital was utilised as a supplementary hospital to Arthur Road, owing to the successive epidemics of Small-Pox, Influenza and Cholera. For ten months it became an infectious diseases hospital treating all diseases other than those that were then epidemic, in addition to plague and mumps (the latter mostly military). During the Influenza epidemic, two wards were placed at the disposal of the Social Service League and the Hindu Medical Association for the treatment of Influenza cases. Some cases of influenza were also treated in the observation wards.

II.—General Statistics.

4. The total number of admissions was 1,198 as contrasted with 797 and 883 during the previous two years respectively.

5. The principal admissions were Plague 328, Influenza 157, Mumps 246, Chicken-pox 133, Measles 56 and Relapsing Fever 22 as contrasted with Plague 476 and Mumps 171 in 1917.

6. The subjoined statement shows the admissions, deaths, recoveries and mortality rates among the above:—

Diseases.	Admissions.	Deaths.	Recoverties.	Case-mortality rate per cent.
Plague	328	263	65	80·1
Mumps	246	4	242	1·6
Influenza	157	32	125	20·3
Chicken-pox	133	..	133	....
Measles	56	4	52	7·1
Small-pox	29	4	25	13·7
Relapsing fever	22	3	19	13·6
Cholera	5	1	4	20·0
Erysipelas	4	1	3	25·0
Cerebro-Spinal Meningitis	1	1	..	100·0
Diphtheria (Nasal)	1	..	1	....
Whooping cough	21	1	20	4·7
Observation cases	195	35	160	17·9
Total ..	1,198	349	849	29·1

7. Military patients.—Troops, followers, etc., numbering 322, from India and overseas were treated during 1918, as compared with 220 in 1917 and 186 in 1916 The following statement shows the admissions, deaths, recoveries, etc.:—

Diseases.	Admissions.	Deaths	Recoveries.	Case-mortality rate per cent.
Mumps...	216	3	213	0·9
Measles	30	...	30	...
Chicken-pox	37	...	37	...
Small-pox	14	...	14	...
Relapsing fever	7	...	7	...
Plague	6	2	4	33·3
Cholera	1	...	1	...
Cerebro-spinal Meningitis	1	1	...	100·0
Observation cases	10	3	7	30·0

The charges recoverable for the treatment of the above patients approximately amounted to Rs. 8,350, as compared with Rs. 5,440-8-6 and Rs. 4,000-8-0 in 1917 and 1916, respectively.

8. The Observation cases for general diseases numbered 195, of whom 35 died and 160 recovered, equivalent to a mortality rate of 17·9 per cent.

9. *Plague* :—There was nothing to specially mark out the plague epidemic of 1918, from those preceding it. The admissions numbered 328, as against 476,411, and 135 in 1917, 1916 and 1915. The latter year was characterised by the lowest admissions from plague since it appeared in 1896. The case mortality rate was 80·1 per cent. as compared with 75·4. It approximated to that of 1902 and 1909 when it stood at 81·5 and 80·2, respectively.

10. *Influenza* :—Cases of a mild type of influenza began to be admitted from the latter end of June upto end of July. Except in a few instances, they were unaccompanied by pneumonia and the fatality was extremely small. Early in September however the more virulent form appeared. Most of the cases had pneumonia with profuse mucopurulent or purulent sputum. In the wards set apart for the Social Service League and Hindu Medical Association, there were treated 117 patients, of whom 24 died and 93 recovered, the case mortality was 20·5 per cent. These cases were under the treatment of Dr. Erulker. The rest, *i.e.*, 40 cases were treated in the observation ward, with 8 deaths and 32 recoveries, the rate of mortality was also 20 per cent.

11. *Relapsing Fever* :—Of the 21 cases of relapsing fever, 14 were local cases and 7 were imported from Mesopotamia. Local cases were observed after an interval of 10 years. The other diseases treated, *viz* :—Small-Pox, Chicken-Pox, Measles and Mumps, do not call for any remarks.

III.—The Treatment of Plague by Colloidal Preparations.

12. Observations on the treatment of plague with subcutaneous injections of colloidal preparations have now extended over two full epidemic periods. During the year under report, 107 cases were treated out of the total admissions 328. The procedure adopted last year was followed, *viz* :—to exclude all moribund, semi-moribund, convalescent and semi-convalescent patients and those whose duration of illness was six days and over, and thus to restrict the treatment to the most acute cases from the first to the fifth day of illness who clinically exhibited some chances of recovery. Of the 107 thus patients treated, 75 died and 32 recovered, the case mortality rate was therefore 70·0 per cent., *i.e.*, about 10 per cent. more than last year. The results of 1917 and 1918 together with those of 16 cases tentatively treated in 1916 stand as under :—

	No.	Died.	Recovered.	Case-mortality rate per cent.
*(*a*) Clinically unfit cases ...	433	397	36	91·6
(*b*) Late and convalescent cases.	92	47	45	51·0
(*c*) Cases treated by colloidal preparations.	295	190	105	64·4

* In these are included many admissions to whom the treatment could not be applied owing to the colloidal preparations being not obtainable for some time.

The foregoing results indicate that among 295 patients treated with various colloidal preparations the case mortality was 64·4 per cent. They further indicate that the cases rejected were of extreme gravity in class (*a*) with an average mortality of 91·6 per cent; and that those in class (*b*) had a naturally high recovery rate. The inclusion therefore of the above classes with class (*c*) would not have brought out any appreciable results to show the utility or otherwise of the treatment applied. The observations of the Plague Research Commission conducted upon identical lines showed that 222 serum-treated cases had the mortality rate of 66·2 per cent., whereas among an equal number of control cases it was 73·9 per cent. It thus appears that the colloidal treatment did not in any way prejudicially affect the recovery rate, even if it did not materially increase it. That the cases so treated were not of a milder type than hitherto, is shown by the fact that the average hospital mortality rate of cases treated in 1917 and 1918 was 77·5 per cent. as compared with 76·9 from 1909-1912 when the Plague Research Commission conducted those observations. The reduction in the rate of mortality under colloidal treatment cannot therefore be attributed to the inclusion of milder cases, as it might appear to be likely at first sight.

As regards the relative efficacy of the various colloidal preparations used, the following table summarises the results :—

Colloidal Preparations.	No.	Died.	Recovered.	Case-mortality rate per cent.
Collosol Hydrargyrum ...	21	15	6	71·4
„ Argentum ...	93	60	33	64·5
Electro-Argol	2	2	...	100·0
Collosol Iodine	106	63	43	59·4
Iodeol	63	41	22	65·0
Ioglossal	10	9	1	90·0
Total ...	295	190	105	64·4

It appears from the foregoing data that Collosol Iodine was the most effective preparation inasmuch as 106 cases treated with it had the lowest mortality 59·4 per cent. Next in order was Collosol Argentum 93 cases, with 64·5 per cent. mortality and it was closely followed by Iodeol 63 cases with 65 per cent.

The above preparations being comparatively new and hitherto not used in the treatment of plague, were somewhat tentatively used in 1916 and partly in 1917. As experience showed that they were harmless, Collosol Iodine and Argentum were applied in doses 5 *c. c.*, injected subcutaneously near the buboes. The injections were repeated daily until general and local improvement was manifest. The number of injections required varied from four to six in each case. Iodeol was administered 1-2 ampoules daily. No ill-effects, local or general, were observed.

It would be desirable in future to apply this treatment more extensively and to have daily simultaneous examinations of the blood of the patients in order to definitely settle the class of patients in whom this treatment is likely to be useful. Past experience in the investigation of Serum treatment does not, however, hold out any hope that the treatment would be effective in cases of bubonic plague with septicæmia.

IV.—The Maratha Hospital as a Plague Hospital.

13. As this is, in all probability, my last report prior to retirement, I should like to add that considerable improvements, additions and alterations have been made since I was placed in charge of this hospital in 1902. The hospital was originally built by the late Sirdar Mir Abdul Alli, Superintendent of the C. I. D., from donations collected in the City, and it was located on a strip of Municipal land vested in the Improvement Trust. By the time the Sirdar died in 1905, he had thus put up 5 Wards, 1 Dispensary and Nurses' retiring room, 3 double blocks for Nurses' Quarters, 1 block for the Medical officer's office and two blocks, each for the subordinate and inferior staff. These were all pucca built structures constructed under his personal supervision. He also constructed 2 temporary wards from the materials

of the old Modikhana Plague Hospital supplied to him. Since 1906 the following improvements have been made:—

Boarded ceilings and Boarded eaves to the wards, office, Dispensary and Nurses' quarters. A new mortuary, a new kitchen for the hospital and another for the nursing staff; 2 blocks of semi-permanent structures for dhobees and sweepers; the old wards were also repaired and strengthened and 5 sets of W. Cs. and washing places were put up for patients, subordinates and inferior staff, and gas was laid on in the wards, compound, etc.

The cost of these works was met from the yearly plague grant voted by the Corporation.

14. This institution having begun work as a plague hospital for Marathas only, became since 1902 a general plague hospital for the northern part of the City upto 1905 and subsequently the only general plague hospital in Bombay. Europeans, Anglo-Indians, Parsees, Jews, Christians, Hindoos and Mahomedans were all admitted; special wards being set apart for Europeans; and for Parsees during the inter-epidemic seasons only. Whenever the demands upon the Arthur Road Hospital have been heavy owing to the prevalence of other infectious diseases, it has formed an annexe and has treated all kinds of infectious diseases. Since 1915, about 730 Military patients, troops and followers from India and overseas, suffering from various infectious diseases have been treated. The main work of the hospital has however been confined to plague only. During the last 17 years 11,301 plague cases have been treated with 8,550 deaths, equivalent to a case mortality rate of 75·65 per cent. It has fluctuated between 71 and 81 per cent., but during the greater period it has remained almost stationary.

V. Racial Incidence of Plague.

15. The racial incidence of plague and its fatality have been often discussed in the numerous reports of the Health Department. These remarks are therefore restricted to the cases as observed at the Arthur Road and Maratha Hospitals from 1896-1918. During the course of 22 epidemics the total number of plague cases treated at these institutions was 17,675: there were 13,222 deaths and 4,453 recoveries: the case mortality rate was therefor 74·8 per cent. This should be considered the average fatality in our public hospitals where fully 70 per cent. of patients are admitted with septicæmia, the average duration of illness on admission being between 3-4 days. Considering that in the great majority of fatal cases, death supervenes between the 5th and 6th day, it becomes apparent how utterly hopeless are the chances of there being any possibility of bringing about any appreciable diminution in the mortality rate in plague. The plague hospitals become thus converted into dying houses, where the patients pass the last few hours of their life: literally they are a half way house between their homes and the cemetery. The dead, and the dying at their last gasp are frequently taken to the hospitals, and it is the latter that go to swell the mortality rate and bring disrepute to hospital treatment.

The racial fatality rate is clearly brought out by the subjoined statement:—

Races.	Admissions.	Deaths.	Recoveries.	Case-mortality rate per cent.
Hindus	13,228	10,211	3,017	77·2
Mussalmans	2,335	1,620	715	69·3
Native Christians	1,676	1,142	534	68·1
Parsees	305	171	134	56·0
Europeans and Anglo-Indians ...	68	38	30	55·8
Jews and Beni-Israelites ...	56	36	20	64·3
Japanese	5	2	3	40·0
Chinese	2	2	.....	100·0
Total ...	17,675	13,222	4,453	74·8

The foregoing figures show that Hindoos, comprising all sub-divisions, exhibit the highest fatality rate as a class—77·2 ; that Mussalmans and Native Christians have a slightly lower rate and that the fatality among Europeans and Anglo-Indians and Parsees is about equal. This racial factor determines the fatality in cholera too, where similar disproportion has been noted. There is no doubt that a lower social status, coupled with want, poverty, and overcrowding amidst insanitary surroundings and intemperance are vital factors in lowering the power of resistance. Alcoholic patients of any class severely react to plague infection, and succumb in large numbers.

16. During the last 18 years it has been noted that although the incidence of plague has greatly declined, and admissions have fallen from 1,518 in 1901 to 135 only in 1915, the rate of case mortality has not been affected to any considerable extent and the difference between 1901 and 1905 was just 5 per cent. lower in the latter year. It proves conclusively that however low the incidence of the epidemic, plague does not alter its virulence nor abate its toll of life. It has gone on year after year at the same rate, supplying cases to the hospital, 70 per cent. of whom are septicæmic with a recovery rate of about 8 per cent., the balance of 30 per cent. being made up of sterile cases in all degrees of severity. And it might rightly be reiterated that the hospital becomes merely a dying house, as the patients are brought too late for any treatment to be effective.

VI. The Serum Treatment of Plague.

17. Full and detailed reports upon the serum treatment of plague have been submitted from time to time after extended observations throughout a series of epidemics. Hopes were at one time entertained, that in the Anti-plague serum, we possessed a potent remedy but the observations that I conducted with Drs. Galeotti, Polverini, Mayr and Berestneff in 1898-1901 clearly showed that anti-plague serum was practically useless in the treatment of plague with any degree of septicæmia except the very mildest, *i.e.*, those with not more than 2 to 3 colonies from 0·25 c c. of blood. We also concluded that serum was of benefit only in those cases of bubonic plague in whom there existed no blood infection. And the marked success of the treatment in private cases was therefore due to this important factor. These observations were confirmed by the Plague Research Commission under the presidency of Prof. C. J. Martin, C.M.G., F.R.S., Director of the Lister Institute of London.

The Commission with Col. Liston, Major Gloster, the late Dr. Sydney Rowland and Drs. Petrie and Avari worked during four epidemic seasons and treated 222 cases of bubonic plague, with 222 similar control cases under observation. The cases were selected by me from clinical symptoms as those apparently most amenable to treatment. Daily blood examinations were made by culture and serum was applied combined intravenously and subcutaneously. The results indicated that in sterile cases, serum treatment reduced the case mortality by about 8·4 per cent., but that in slight septicæmia as above indicated, there was no difference between the serum treated and control cases, and finally that the largest number of cases with high degree of septicæmia, serum treated cases and controls died equally, although life was prolonged in the former. It was found that 65 per cent. of the cases selected as clinically suitable for observation, serum and control, were septicæmic.

18. The Advisory Board in London under whose direction the Commission was working were however not satisfied as to the efficacy of serum treatment although assured by those who had the opportunity of studying the cases at the bed-side—that the benefit observed in the results was due to the application of anti-plague serum only. They held that "The Yersin serum shows no indication of any advantage for the serum cases as against its own controls, and the reduction of mortality (10 per cent.) in group O (*i.e.*, sterile cases) as compared with the total controls, is of indefinite significance. In the antitoxic series the mortality is a good deal less (20 per cent.) than in the contemporary controls, but the difference is not statistically significant and the exceptionally high mortality among the controls indicate that they are not a fair sample."

19. This is but a curious attitude of mind for those sitting in judgment over the work of others 6,000 miles away, and in a disease where the average rate of hospital case mortality has been uniformally 75·5 per cent. throughout a series of years to underestimate the gain of 10 per cent., *i.e.*, 10 more lives saved out of every 100 or to put it in another way, the increase of recovery rate from 25 to 35 per cent.! When the gain was 10 per cent. only, it was considered to be of "indefinite significance", and when it was 20 per cent., it was not "statistically significant" !!! It must be however admitted that in the latter, the cases were too few. However that may be, a higher mortality rate in control cases, compared with the serum cases, does not necessarily indicate that the former were of a graver type and therefore no

actual benefit accrued to the serum-treated cases. Upon the above data the Advisory Board came to the following conclusion :—

"From the whole inquiry therefore it appears that the administration of the available sera is not a practicable means of bringing about any material diminution in the mortality from plague in India. It may well be that better results would be obtained if the treatment could be commenced within a few hours of the onset of the disease : this, however, is in the great majority of cases, impossible in ordinary hospital practice."

The above conclusion was to say the least extremely disappointing and unfortunate apart from its being so inconclusive. For, I and those who have worked with me for a number of years, never contended that the serum treatment was a panacea for plague under all circumstances or that it would materially reduce "the mortality from plague in India." All that we claimed was that in the serum treatment we possessed a remedy that was of proved utility in certain types of plague, *i.e.*, in sterile cases. We had the strong support of scientific opinion like that of Roux, Yersin, Simond, Kitasato, Burnett Ham and others, but all was practically ignored by the Advisory Board. Nor was my collection of records of private cases, many treated under more favourable circumstances submitted by them to scrutiny, as they tended conclusively to support the latter part of their conclusion, that by early treatment—but not with a few hours of the onset of the disease, for that is an impossibility in India where the diagnosis of plague is not generally accepted at once—better results would be obtained.

20. Thus ends an unsatisfactory chapter in the history of plague investigation in India. No further efforts, it appears, have been made to improve the methods of preparation of sera of greater antitoxic potency, nor has the suggestion that I made so long ago as 1901-02, *viz.*, to supply the deficiency in the complement in the serum (lost through heating) by the addition of fresh normal horse serum at the bed-side at the time of injection of the anti-plague serum.

The Advisory Board further added :—

> "We are glad to take this opportunity of expressing our indebtedness to Dr. N. H. Choksey without whose cordial encouragement and assistance, this inquiry would have been hardly possible. Dr. Choksey's own observations* on the serum treatment of plague have extended over many years and he has an unrivalled experience of the matter."

This "unrivalled experience" however availed but little in convincing the Board to affirm even this much that the application of serum was useful and of benefit in sterile cases of bubonic plague in whom the rate of mortality varies between 35 to 50 per cent. in different epidemics, but which is capable of reduction to 15 to 20 per cent. by the treatment early applied.

VIII.—Treatment of Plague by Drugs.

21. No drug has been hitherto discovered that is capable of destroying the bacillus pestis in the human body or neutralising its toxin. All attempts to treat plague by the exhibition of germicides, like mercurial and iodine preparations; tincture iodine and liquor iodine terchloride have proved useless, and even pure carbolic acid in doses of 72—100 grains per day has been found to be inert. In the absence of potent sera, bactericidal or antitoxic, the treatment resolves itself into supporting the heart and circulation, until nature overcomes through its even efforts, the baneful effects of the toxin. And nature works within certain definite limits only and no further. The line of treatment adopted at the Arthur Road and Maratha Hospitals, has met with considerable success; it has been largely adopted by private practitioners and others not in Bombay alone, but in other parts of India as well. It has had the approval of that distinguished French Scientist, who was the first to indicate the relation between the rat-flea and human infection—Dr. P. L. Simond, and of Prof. W. J. Simpson, and others. Finally the watch word of a plague hospital should be "Keep the heart going and let nature do the rest."

---

* *Vide* British Medical Journal 1908, Vol. I, pages 1, 282 and the references therein given.

N. H. CHOKSY, M.D., F.C.P.S.,
Assistant Health Officer.

Maratha Plague Hospital,
31*st March* 1919.

Report of work done in the Municipal Laboratory during 1918.

General.

I have the honour to submit the Report of the work done during the year 1918 in the Municipal Laboratory.

Dr. L. L. Joshi was in charge of the Laboratory for the year except from 13th May 1918 to 24th June 1918 and again from 20th November 1918, when he went on leave. During his absence I acted for him.

6,386 samples were examined, (1,677 chemically and 4,709 bacteriologically*) as compared to 4,850 samples examined during the year 1917.

Chemical.

Out of 1,677 samples examined chemically, 60 samples were examined in connection with Research Work.

(*a*) *Foodstuffs.*

861 samples were examined as shown in the attached statement.

Substance.	Genuine.	Fair.	Doubtful purity.	*Not* genuine.	Fit for Human Consumption.	Unfit for Human Consumption.	Total.
Milk	300	...	19	370	...	1	690†
Sardin Fish	...	...	...	...	1	...	1
Arrowroot	...	...	...	...	1	...	1
Cheese	...	...	...	...	...	2	2
Apple Tins	...	...	...	...	2	...	2
Green Gooseberry	...	...	...	...	1	...	1
Oysters	...	...	...	...	2	...	2
Yellow Cling Peaches	...	...	...	...	1	...	1
Butter	41	...	...	...	...	1	42
Figs	...	...	...	...	...	1	1
Allubukhar	...	...	...	...	...	1	1
Jam	...	...	...	...	1	...	1
Corned Beef	...	...	...	...	...	1	1
Lime Fruit Squash	...	...	...	...	1	...	1
Olives	...	...	...	...	1	...	1
Ghee	20	...	...	12	...	3	35‡
Tea	2	...	...	...	...	...	2
Coffee	2	...	...	...	...	...	2
Oils	27	1	...	...	...	...	28
Flour	7	2	...	...	1	8	18
Vinegar	1	...	...	...	...	...	1
Sugar	...	...	...	...	1	...	1
Meat	...	...	...	...	...	1	1
Coriander Seed	...	...	...	...	...	1	1
Tamarind	...	...	...	...	...	1	1
Turmeric	...	...	...	...	1	...	1
Tur pulse	...	...	...	...	...	1	1
Masur	...	...	...	...	...	2	2
Gram	...	...	...	...	...	1	1
Garlic	...	...	...	...	1	1	2
Rice	...	...	...	...	...	3	3
Biscuits	...	...	...	...	...	1	1
Condensed Milk	...	...	...	...	1	1	2
Cream	1	...	...	...	...	...	1
Chillies	...	...	...	...	1	1	2
Kepler's Malt	...	...	...	...	1	...	1
Boiled Crab	...	...	...	...	1	...	1
Glaxo	...	...	...	...	1	...	1
Lactogen	...	...	...	...	1	...	1
Lime Juice	...	...	...	...	1	...	1
Kokum Balls	1	...	...	...	...	...	1
Honey	1	...	...	...	...	...	1
Total ..	403	3	19	382	22	32	861

* = Examination for each kind of microbe being counted as one sample as usual.

† Includes samples of Cow's, Human and Evaporated Milk.

‡ Includes six samples examined for admixture.

259 samples of Waters including two Aerated Waters were examined as follows :—

Waters.	For Potable Purposes.				Total.
	Fit.	Fair.	Suspicious.	Unfit.	
Public Water Supply	217	...	...	...	217
Well Waters	4	10	4	14	32
Tap Waters	...	...	...	1	1
Tank Waters	...	6	...	1	7
Aerated Waters	2	...	...	...	2
Total ...	223	16	4	16	259

Drugs.

2 Samples of Glycerine were examined for impurities.

1 Sample of Liq. Ammonium Acetate for its strength as compared with that of the B. P. preparation.

1 Sample of Tinct. Cardimum for its strength as compared with that of the B. P. preparation.

1 Sample of Tinct. Cinchona Co. for its strength as compared with that of the B. P. preparation.

Miscellaneous.

3 Samples of fat for colouring purposes.

3 „ „ Bleaching Powder to find out the percentage of available Chlorine.

1 Sample of Yellow Liquid to ascertain the nature of the same.

1 „ „ Lime for the detection of Lime Oxide.

1 „ „ Soda Bicarb. for impurities.

1 „ „ Boiler Stuff for quantitative Analysis.

1 „ „ Reservoir Water for „ „

1 „ „ Cotton like thing for ascertaining the nature of the same.

2 „ „ Fish Guano and Fish Manure.

Samples for Diagnostic Purposes.

538 Samples of Urine were examined in this connection.

Milk for Legal Purposes.

690 Samples of milk were examined Chemically for Legal Purposes, of which 369 were found to be *not* genuine. Legal proceedings were taken in 367 cases, the details of which are given as follows :—

Ward.	Number of cases.		Total.	Fine.		Total.
	Successful.	Withdrawn.		Lowest.	Highest.	
				Rs.	Rs.	Rs.
The Deputy Health Officer, A ..	26	.....	26	1	15	170
„ „ „ „ B ...	37	2	39	2	40	337
„ „ „ „ C ...	41	8	49	1/8	15	259/8
„ „ „ „ D ...	43	3	46	2	75	765
„ „ „ „ E ...	69	17	86	3	60	1,064
„ „ „ „ F ...	50	9	59	5	75	1,697
„ „ „ „ G ...	48	14	62	5	100	1,436
Total ...	314	53	367	GRAND TOTAL Rs.		5,728/8

Bacteriological.

4,709 Samples were examined bacteriologically.

(a) *Foodstuffs.*

489 Samples were examined as follows :—

34 Samples of milk for Cholera.
76 „ „ „ „ B. Typhosus.
6 „ „ „ „ Diphtheria.
2 „ „ „ „ Scarlet Fever.
45 „ „ Rice „ Cholera.
7 „ „ Dal „ „
1 Sample of Patani „ „
1 „ „ Flour „ „
1 „ „ Ghee „ „
1 „ „ Cream „ „
1 „ „ Curd „ „
2 „ „ Apple Tins for Sterility.

Waters.

1,346 samples were examined as follows :—

939 Samples were examined of which 153 were examined for Lactose Fermenters and 143 for B. Coli (Houston's) in various dilutions ranging from 0·01 c c to 50 cc. Other samples were examined as follows with *negative* results:—

301 Tap waters for Cholera.
93 „ „ „ B. Typhosus.
3 „ „ „ Diphtheria
8 Well Waters for Cholera.
1 „ Water for B. Typhosus.
1 Cistern Water for B. Typhosus.

282 Samples of *Stools* were examined for the following :—

279 Samples of Stools were examined for Cholera and in 156 samples Comma Bacilli were detected, besides 3 samples were examined for Typhoid with negative results.

6 Samples of Urine were examined for the following :—

2 Samples were examined for B. Coli and in one B. Coli was detected.
3 „ „ „ for Typhoid with negative results.
1 Sample was examined for Cholera „ „ „

Disinfectants.

22 Samples were examined in this connection as follows :—

7 Samples of Izal Powder.
4 „ „ Zondo Fluid.
11 „ „ Other makes.

Lymph.

2,610 Capillary tubes were examined for the presence of pathogenic microbes with negative results.

Samples for diagnostic purposes

4 Samples of Blood for Widal's Reaction.
88 „ „ „ „ Malaria.
4 „ „ „ „ Plague.
7 „ „ „ „ Pneumococci.
3 „ „ „ „ Piroplasmosis.
5 „ „ „ „ Relapsing Fever.
20 „ „ „ „ Leucocytic Counts.
50 „ „ Sputum „ Tubercle Bacilli.
46 „ „ „ „ Pneumococci.
9 „ „ Guinea Pig Fleas for B. Pestis.
6 „ „ Urine for Gonococci.
1 Sample „ „ „ Tubercle Bacilli.
1 „ „ Oysters for Sterility.
1 „ „ Tissue of dead Antelope for Tubercle Bacilli.
1 „ „ Stool for Amæba.
1 Smear from Lung from dead animal for Tubercle Bacilli.
1 „ of Pus for Gonococci.
4 Dead Guinea Pigs for B. Pestis.
1 Swab of Mucus Secretion for Scarlet Fever.
9 Swabs for Diphtheria.
1 Stool for Intestinal Ova.
3 Swabs for Meningococcus.

Central Disinfection Depot.

The preparation of Rat-poison was continued. The details are as follows:

Balance on 1st January 1918	lbs.	224
Prepared during the year (from 1st January 1918 to 31st January 1918)	„	2,916
Total	lbs.	3,140
Issued during the year 1918	„	2,576
Balance of Rat-poison on 1st January 1919	lbs.	564

The work of the Laboratory staff has been very satisfactory.

J. S. NERURKAR, B.SC., L.M. & S., D.P.H. (*Cantab.*),
Ag. Municipal Analyst.

Statement showing the samples of Milk examined during the year 1918.

Received from	Genuine.	Doubtful Purity.	Not Genuine.	Unfit for Human consumption.	Total.
The Deputy Health Officer, A Ward...	104	3	31	1	139
,, ,, ,, ,, B ,, ...	33	6	46	...	85
,, ,, ,, ,, C ,, ...	26	5	55	...	86
,, ,, ,, ,, D ,, ...	51	1	48	...	100
,, ,, ,, ,, E ,, ...	56	3	63	..	122
,, ,, ,, ,, F ,, ...	14	...	56	...	70
,, ,, ,, ,, G ,, ...	11	1	66	...	78
Special Assistant Health Officer, Arthur Road Hospital	...	1	2	...	3
Veterinary Inspector	1	...	1	...	2
Private...	4	...	1	...	5
Total ...	300	20	369	1	690

Statement showing the samples of Ghee examined during the year 1918.

Received from	Genuine.	Not Genuine.	Unfit for human consumption.	Total.
The Dy. Health Officer, A Ward	...	9	3	12
,, ,, ,, ,, B ,, ...	4	...	...	4
,, ,, ,, ,, E ,, ...	6	...	...	6
,, ,, ,, ,, G ,, ...	...	1	...	1
Municipal Analyst	28	...	...	28∠
Private	...	2	...	2
Total ...	38	12	3	53

∠=Includes samples prepared from Butter.

Statement showing the samples of water examined bacteriologically during the year 1918 in this Laboratory.

Received from	Public water supply.						Tap water for Typhoid.	Tap water for diphtheria.	Well water for Cholera.	Well water for Typhoid.	Cistern water for Typhoid.	Total.
	Microbes. per c. c.	Laotose fermenters.	B. Coli (Houston's).	B. E. Sporogenes.	Cholera vibrio.	Streptococci.						
Municipal Analyst	142	153	143	143	217	143	..	..	1	..	..	942
Deputy Health Officer, A Ward	..	..	..	..	119	..	27	1	1	..	..	148
Do. do. B ,, ...	..	..	..	..	24	..	13	..	1	..	..	38
Do. do. C ,, ...	..	..	..	..	56	..	12	..	..	..	..	68
Do. do. D ,, ...	..	..	..	..	18	..	13	..	..	1	..	32
Do. do. E ,, ...	..	..	..	..	45	..	25	2	2	..	1	75
Do. do. F ,, ...	..	..	..	..	19	..	..	..	..	..	..	19
Do. do. G ,, ...	..	..	..	..	14	..	7	..	3	..	..	24
Total ..	142	153	143	143	512	143	97	3	8	1	1	1,346

Statement showing the number of samples of Bombay Waters examined bacteriologically for various microbes and in which the same were detected during the year 1918, in the Municipal Laboratory.

Lactose Fermenters. ∠		B. Coli (Houston's).		B. E. Sporogenes.		Cholera Vibrio.		Streptococci.		B. Typhosus.		Diphtheria.	
I	II	I	II	I	II	I	II	I	II	I	II	I	II
153	152	143	143	143	Nil.	338	Nil	143	Nil.	235	Nil.	3	Nil.
153	152	143	143	143	Nil.	338	Nil.	143	Nil.	235	Nil.	3	Nil.

∠.=Were looked for in various dilutions ranging from 0·01 cc to 50 cc.

I.=Total number of samples examined.

II.=Total number of samples in which the same were detected.

Statement showing the Well and Tank Waters examined during the year 1918, at the Municipal Laboratory.

No.	Received from	Situated at	Opinion as to Potability.
1	Malaria Inspector, D Ward.. ..	62, Mugbhat Cross Lane	Fair.
2	Deputy Health Officer, G „	45, Mahim Bazar Road	*Fit.*
3	Do. do. F „	558, Sewri Road	*Unfit.*
4	Do. do. F „	531 and 535, Sewri Cross Road	„
5	Do. do. F „	827 and 838, Sewri Cross Road	„
6	Do. do. G „	858, Elphinstone Road	„
7	Do. do. G „	554, New Poibawdi Road	„
8	Do. do. F „	735-735A, Sewri Cross Road	„
9	Malaria Inspector, F „	155 AA, Dadar Road	Suspicious.
10	Do. do. F „	35-37, Raghunath Dadaji Street..	Fair.
11	Do. do. G „	83, 84, Lady Hardinge Road	„
12	Do. do. F „	419, Wadala Road No. 1	„
13	Do. do. F „	„ „ No. 2	Unfit.
14	Do. do. F „	28-64, Sion Road	Fair.
15	Do. do. F „	1072-74, Sewri Cross Road..	Unfit.
16	Do. do. F „	85-89, Sewri New Road	Fair.
17	Do. do. C „	No. 46 joint with No. 48, 3rd Marine Street ..	Unfit.
18	Do. do. F „	543, Sewri Cross Road	„
19	Deputy Health Officer, C „	171-207, Thakurdwar Road	Fair.
20	Do. do. C „	124, Fanaswady	Fit.
21	Malaria Inspector, G „	1038, Elphinstone Road	Fair.
22	Do. do. G „	1056-57 „ „	„
23	Deputy Health Officer, C „	8-12, 1st Pinjrapole Street	„
24	Malaria Inspector, G „	208-10, Mahim Bazar Road	Unfit.
25	Do. do. G „	106, Manmalla Tank Road..	Most unfit.
26	Do. do. C „	46-48, 3rd Marine Street (Joint well)	Unfit.
27	Do. do. C „	7, Bhasker Lane	Suspicious.
28	Do. do. C „	449, Girgaum Road Parwati Building	Fit.
29	Do. do. G „	978-74, Portuguese Church Street..	Suspicious.
30	Do. do. D „	North-East Corner of Banganga	„
31	Deputy Health Officer, C „	9-395, Thakurdwar Road	Fit.
32	Do. do. E „	8-15, Parel Road (Dr. Masina's Land).. ..	Unfit.
		TANK WATER.	
1	Malaria Inspector, C Ward	Bhuleshwar Tank, Bhuleshwar Road	„
2	Private (Party)	Manekji Petit Mill	*

*|| Sample was examined for quantitative Analysis.

Statement showing the samples examined bacteriologically in the Municipal Laboratory, during the year 1918.

Received from	Tap water.			Well water.		Milk.				Stool.				Urine.					Disinfectant.			Sputum.		Blood.							Swabs.		Smears from lungs for T. B.	Guinea Pigs for B. Pestis.	Guinea Pigs diseases for B. Pestis.	Pus and Blood Smears for Pneumonia.	Mucus Section for Scarlet fever.	Cistern Water for Typhoid.	For Cholera.					Glycerinated Vaccine.		Bombay Waters.	Tinned Apples for Bacteriological Examination.	Oysters for Sterility.	Tissue of dead Antilope for Tubercle Bacilli.	Cream for Cholera.	Curd for Cholera.	Total.
	Cholera.	Typhoid.	Diphtheria.	Cholera.	Typhoid.	Cholera.	Typhoid.	Diphtheria.	Scarlet Fever.	Cholera.	Typhoid.	Intestinal parasites.	Amœbe.	Bacillus Coli.	Typhoid.	Cholera.	Tubercle Bacilli.	Gonococci.	Izal Powder.	Zondo Fluid.	Other Makes.	Pneumonia.	Tubercle Bacilli.	Widal's reaction.	Leucocytosis.	Malaria.	Piroplasmosis.	Pneumonia.	Relapsing fever.	Plague.	Meningococcus.	Diphtheria.						Rice.	Ghee.	Flour.	Patni.	Dal.	Sterility.	Pathogenic Microbes.						
Health Officer	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	7	4	11	1	..	..	20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	47
Special Assistant Health Officer ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
Municipal Analyst	2	..	..	1	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	939	..	..	..	..	944
Deputy Health Officer, A Ward ..	119	27	1	1	..	17	24	3	2	5	3	..	..	..	..	..	..	..	..	..	..	14	..	..	..	11	..	..	..	..	..	..	3	8	..	1	..	28	..	..	..	2	..	..	..	..	..	..	272
„ „ „ B „ ..	28	9	..	1	..	3	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	..	..	30	..	4	..	..	..	3	..	..	..	..	..	5	1	..	..	..	..	..	..	..	1	1	97
„ „ „ C „ ..	56	12	..	..	..	6	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	90
„ „ „ D „ ..	18	13	..	..	1	..	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	46
„ „ „ E „ ..	45	25	2	2	..	6	21	3	..	1	..	..	..	..	..	..	..	..	..	..	..	7	1	..	..	9	..	..	..	..	..	5	..	..	..	..	1	6	..	..	..	1	..	..	..	..	..	..	135
„ „ F . ..	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	4	..	..	..	..	..	..	1	1	..	..	3	..	1	1	3	..	..	..	..	..	..	36
„ „ „ G „ ..	14	7	..	3	..	..	5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	1	..	..	..	..	..	..	..	35
Superintendent of Vaccination ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1,818	792	..	..	..	..	2,610
„ „ V. Gardens ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Special Assistant Health Officer, Arthur Road and M. Hospitals ..	..	..	..	..	..	1	..	..	..	272	..	..	..	..	..	1	..	..	..	..	..	8	6	..	..	14	..	2	5	3	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	316
Veterinary Inspector	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Private	..	..	..	..	..	..	..	..	..	1	..	1	1	2	..	..	1	6	..	..	..	..	41	2	..	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	59
Total ..	301	93	3	8	1	34	76	6	2	279	3	1	1	2	2	2	1	6	7	4	11	46	50	4	20	88	3	6	5	4	3	9	1	4	9	2	1	1	45	1	1	1	7	1,818	792	939	2	1	1	1	1	4,709

Statement showing the samples examined chemically in the Municipal Laboratory during the year 1918.

Received from	Bombay Waters.	Milk.	Well Water.	Urine.	Tap Water.	Butter.	Ghee.	Oils.	Flour.	Tea.	Coffee.	Glycerine.	Tank Water.	Rice.	Masur and Masur Pulse.	Chillies.	Kepler's Malt.	Bolled Crab.	Glaxo.	Lactogen.	Bleaching Powder.	Garlic.	Cheese.	Lime Juice.	Kokum.	Fat.	Tinture Cardimum.	Tinture Chichona.	Liquid Amon Acetate.	Honey.	Soda Water.	Lemonade.	× Sardine Fish.	Arrow-root.	Condensed Milk.	Apple Tins.	Green Goose Berry.	Oysters.	Yellow Cling Peaches.	Figs.	Alfubukhar.	Jam.	Corned Beef.	Lime fruit Squash.	Olives.	Vinegar.	Boiler Stuff.	Soda Bi-carbonate.	Cotton like things.	Lime.	Sugar.	Meat.	Coriander Seed.	Tamarind.	Turmeric.	Tur Pulse.	Gram.	Biscuits.	Cream.	Yellow Liquid.	Total.
Health Officer	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	1	1	2	..	1	2	1	1	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18
Special Assistant Health Officer.	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Municipal Analyst	744	..	..	..	1	30	10	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	192
Hydraulic Engineer	73	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	74
Deputy Executive Engineer ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1
Deputy Health Officer, A Ward ..	..	139*O	1	..	..	3	12	5	17	2	2	..	..	3	2	2	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	1	..	..	..	..	1	..	..	1	1	1	1	1	..	1	1	..	..	203
„ „ „ B „ ..	..	85*	..	4	..	8	4	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	104
„ „ „ C „ ..	..	86	8	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	96
„ „ „ D „ ..	..	100*	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	105
„ „ „ E „ ..	..	122*	1	..	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	129
„ „ „ F „ ..	..	70	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	83
„ „ „ G „ ..	..	78	9	..	4	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	93
Storekeeper	..	..	..	..	..	..	..	19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
Special Assistant Health Officer, Arthur Road	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Veterinary Inspector	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Superintendent, Licenses ..	..	..V	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2
Private	..	5*	..	534	1	..	2	1	..	..	..	1	..	..	..	..	..	1	1	1	..	..	1	1	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	552
Grand Total ..	217	690	32	538	8	42	35	28	18	2	2	2	1	3	2	2	1	1	1	1	3	2	2	1	1	3	1	1	1	1	1	1	3	1	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1,677

* Includes samples of cows milk. O Includes a sample of evaporated milk. V Includes samples of human milk. × 2 samples of fish Guano and fish manure.

The Annual Report of the Superintendent of Vaccination for 1918.

Superintendent.

Dr. J. S. Nerurkar was in charge of the Department from 1st January to 12th May and from 24th June to 7th November; for the rest of the year, I was in charge of the Department.

Vaccination Establishment.

The Establishment consists of the Superintendent, the Assistant Superintendent, 10 Vaccinators, 5 Clerks, 17 Karkuns, 3 Peons, 15 Coolies.

Vaccine operations with results during 1909-1918.

2. The following statement gives the number of persons primarily vaccinated and re-vaccinated during 1918 and the preceding nine years, with the number of persons successful and the percentage of success :—

Year.	Primary Vaccinations.			Re-vaccinations.			Total Number of persons vaccinated.		
	Number of persons vaccinated.	Number successful.	Percentage of success.	Number of persons re-vaccinated.	Number successful.	Percentage of success.	Number of persons vaccinated and re-vaccinated.	Number successful.	Percentage of success.
1909	18,447	16,336	88·56	10,669	116	1·09	29,116	16,452	56·50
1910	17,356	15,371	88·56	23,600	70	·30	40,956	15,441	37·70
1911	19,312	17,819	92·27	18,786	86	·46	38,098	17,905	47·00
1912	20,946	18,876	90·13	17,094	201	1·18	38,040	19,079	50·15
1913	20,877	18,559	88·90	15,189	63	·41	36,066	18,622	51·62
1914	20,207	17,704	87·61	12,243	63	·51	32,450	17,767	54·75
1915	19,721	17,831	90·42	10,116	41	·41	29,837	17,872	59·90
1916	19,215	16,529	86·02	31,746	8	·03	50,961	16,537	32·45
1917	18,958	17,330	91·41	19,659	4	·02	38,617	17,334	44·89
1918	18,100	16,036	88·59	45,171	42	·09	63,271	16,078	25·41

It will be observed that the total number of persons operated upon during the year was 63,271 against 38,617 in 1917, of which 18,100 were Primary Vaccinations being 858 less than in 1917, and 45,171 were Re-vaccinations being 25,512 more than in 1917. Out of the Primary Vaccinations, 10,935 were Bombay-born, and 7,165 outborn, compared with 11,188 and 7,770 respectively in the last year.

Of the Primary Vaccinations, 16,036 were successful, the percentage of success being 88·59. This, however, is raised to 98·25, if 1,780 " Unknown " cases be left out. Of the Re-vaccinations, 42 were successful, yielding a percentage of ·09, which, however, is raised to 42·42, if 45,072 " Unknown " cases be excluded. Calculated on the total number of persons vaccinated, the percentage of success works out to 25·41.

Primary vaccination results by age-periods.

3. The following table shows the results in Primary Vaccinations by age-periods :—

Under 1 year.			Between 1 and 6 years.			Above 6 years.			Total results.			Total operations.
Successful.	Unsuccessful.	Unknown.	Successful.	Unsuccessful.	Unknown.	Successful.	Unsuccessful.	Unknown.	Successful.	Unsuccessful.	Unknown.	
13,082	229	1,277	2,854	71	451	100	1	52	16,036	301	1,780	18,117

Vaccinations by others than the Vaccination staff.

4. The subjoined table shows the Vaccinations performed by Private Medical Practitioners, the District Registrars of the Health Department, and the Medical Officers in charge of the two Jails and the Colaba Lunatic Asylum :—

	Primary Vaccinations.							Re-vaccinations.		
				Successful.						
	Males.	Females.	Total.	Under 1 year.	1 and 6 years.	All ages.	Unknown.	Total.	Successful.	Unknown.
District Registrars. ...	...	1	1	1	...	...	...	...	...	...
P. M. Practitioners ...	7	3	10	8	...	2	...	2,652	24	3,585
The two Jails... ...	...	...	...	...	...	...	...	...	...	...
Colaba Lunatic Asylum.	...	...	...	...	...	...	...	...	...	...

Inspection of Vaccination.

5. Table showing the particulars of Primary and Re-vaccinations verified by Inspecting Officers :—

Total number of persons vaccinated.		Total number inspected.				Percentage of inspection to total number vaccinated.				Percentage of cases found successful to total number inspected.				Percentage of success reported by the Vaccinators.	
		By the Superintendent.		By the Asstt. Supdt. and the Head Vaccinator.		By the Superintendent.		By the Asstt. Supdt. and the Head Vaccinator.		By the Superintendent.		By the Asstt. Supdt. and the Head Vaccinator.			
P.	R.	P.	R.	P.	R.	P.	R.	P.	R.	P.	R.	P.	R.	P.	R.
18,100	45,171	S. F. (3,820+88) =3,908	S. F. (1+0) =1	S. F. (6,906+222) =7,128	S. F. (2+25) =27	23·95	100·00	43·68	27·27	97·75	100·00	96·89	9·40	88·59	·09

Heifers inoculated, scraped for emulsion.

6. The table below shows by months number of calves inoculated, and the number rejected after inoculation, owing to sickness ; as also the number of calves scraped for emulsion during the year and the number used for calf-to-arm vaccination.

Heifers.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Number inoculated...	49	52	95	79	57	35	36	35	38	43	50	53	622
Number successful ...	48	51	95	78	54	34	35	34	36	43	46	52	606
Number unsuccessful	1	1	...	1	1	...	1	1	2	...	3	1	12
Number rejected after inoculation owing to sickness	...	...	...	...	2	1	...	...	...	...	1	...	4
Number inoculated for emulsion	29	15	40	54	46	25	25	30	33	33	37	28	395
Number inoculated for calf-to-arm vaccination ...	20	37	55	25	11	10	11	5	5	10	13	25	227

Proceeds from the sale of lymph and from other sources.

7. The following statement shows the proceeds from the sale of lymph, the fees realized from vaccination at private places, etc., during the year under report :—

Amount realized by the sale of lymph.	Municipal moiety of the fees from private vaccination.	Municipal fee (moiety only) for vaccination instruction to Medical Students.	Municipal fee for giving vaccination extracts, &c.	Total.
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
14,138 14 0	2,690 6 0	735 0 0	116 7 3	17,680 11 3

8. The cost of each successful operation including all charges was Rs. 2-4-6 against Rs. 1-14-3 in the preceding year; if the amount realized by the sale of lymph, by fees for private vaccination, etc., (Rs. 17,680-11-3) be deducted from the total expenditure, the cost works out Rs. 1-2-11 against Rs. 1-8-10 for the last year. Cost of single operation.

9. If calculated on the total number of vaccine operations, the cost of each operation, after deducting the proceeds from the sale of lymph, from private vaccination, etc., comes to Re. 0-4-10 against Re. 0-11-1 for the last year.

10. During the year under report 95 certificates of postponement of vaccination of children were granted. Postponement certificates.

11. There were no prosecutions during the year, either for neglect of vaccination or for neglect of inspection of the result. Prosecution under Vaccination Act.

12. The following table shows the different kinds of lymph used, the operations done with each kind and the comparative results obtained during the year 1918 :— Work done with different kinds of lymph.

Kind of lymph.	Number of operations.		Successful cases excluding the "Unknown."		"Unknown" cases.		Percentage of success excluding the "Unknown."	
	P.	R.	P.	R.	P.	R.	P.	R.
(*a*) Human	..	...	..	...	...	...	...	...
(*b*) Animal	5,751	17,224	5,087	10	631	17,310	99·35	71·43
(*c*) Glycerinated	12,349	27,947	10,932	32	1,149	27,862	97·61	37·65
	18,100	45,171	16,019	42	1,780	45,072	98·25	42·42

13. 379 calves were scraped for lymph; the total amount of scrapings came upto 31,933 grains or 84 grains per calf. Lymph.

The lymph was submitted to the Municipal Analyst for bacteriological examination for extraneous micro-organisms. These were not detected on any examination.

14. During the year under report, 9 Military Medical Pupils, 105 Civil Medical, and 33 other students attended the different Public Vaccine Stations. Instruction in Vaccination.

15. The total number of deaths reported from small-pox was 1,024 against 269 in the year preceding. Out of these 476 were under 10 years of age tabulated according to the incidence of vaccination, I find the following :— Small-pox.

	1-30 days.	1-6 months.	7-12 months.	1-2 years.	2-3 years.	3-4 years.	4-5 years.	5-10 years.	Total.
Vaccinated ...	...	...	*1	*3	...	*1	...	†5	10
Unvaccinated..	3	68	77	56	35	21	15	26	301
Unknown ...	2	27	24	22	18	26	13	33	165

* Vaccinated during incubation period of small-pox.

† Reported to be vaccinated outside Bombay.

16. The number of Pilgrims who left Bombay for the Haj during this year was 1,361. Of these, 1,060 were vaccinated in Bombay before embarkation, *i.e.*, 77·88 per cent.

The following table shows the number of males and females and the number of primary vaccinations and Re-vaccinations performed amongst the pilgrims by the Vaccination Staff. The Special Staff, for this purpose, was not engaged during this year :—

	Males.	Females.	Total.
Primary vaccinations	4	3	7
Re-vaccinations	873	180	1,053
Total ...	877	183	1,060

The female pilgrims were vaccinated by Nurse Mrs. Rachelbai of 9 District.

Ill-effects by vaccination.

No serious ill-effects following vaccination were observed or brought to notice during the year.

Vaccination in Bandra and Kurla.

The following table shows the vaccination work done in the Bandra and Kurla circles in 1918 compared with that done in 1917:—

Vaccination Circle.	Population according to the Census of 1911.	Year.	Children successfully vaccinated.		Children available for vaccination.	Persons primarily vaccinated.	Persons re-vaccinated.	Total number of persons operated upon.
			Under 1 year.	Under 6 years.				
Bandra	24,286	1917	154	58	486	288	25	313
		1918	148	73	532	389	613	1,002
Kurla	15,081	1917	61	34	195	127	.....	127
		1918	38	9	314	105	1	106

BOMBAY, *5th April* 1919.

K. Y. SANZGIRI, L. M. & S.,
Ag. Superintendent of Vaccination,
Bombay.

Meteorological Data (Government Observatory, Colaba), Latitude 18°-53'-36", North, Longitude 72°-48'-56", East.

MONTHS.	Barometer.	Reading of Thermometer.				Mean Maximum Solar Radiation.	Difference between Dew-point Temperature and Mean Air Temperature.	Degree of Humidity, complete Saturation being 100.	Prevailing Direction of Wind.	Rainfall.		
	Mean Daily Readings.	Maximum.	Minimum.	Mean Daily Range.	Mean Daily Value.					Number of Days on which Rain fell.	Total Fall of Rain during the Month.	Maximum Fall of Rain.
1918.	In.	°	°	°	°	°	°				In.	In.
January	29·918	85·1	63·7	11·5	75·5	130·8	12·2	67	N.	.....	.....	.....
February	·950	85·0	63·0	10·1	76·2	128·5	11·7	68	N. N. W.	.....	.....	.....
March	·862	88·3	67·3	9·4	81·0	129·6	10·7	71	N. W.	2	1·46	1·35
April	·821	88·2	72·5	8·9	81·7	131·4	10·0	72	N. W.	.....	.....	.....
May	·687	90·1	77·1	6·7	84·2	130·9	7·7	78	W. S. W.	13	11·17	4·98
June	·707	87·6	76·6	5·1	83·1	127·1	7·2	79	W. S. W.	19	10·65	4·45
July	·742	87·0	77·9	4·9	83·0	125·9	7·1	79	W. S. W.	21	4·31	1·79
August	·724	85·6	77·6	4·1	81·7	121·3	6·0	82	W.	25	4·80	0·85
September	·835	86·0	76·5	6·5	81·6	128·7	7·5	78	W.	13	3·06	0·93
October	·864	92·4	75·9	9·5	83·2	134·2	8·7	76	N. N. W.	.....	.....	.....
November	·851	91·2	72·8	10·9	82·2	133·3	12·4	67	N.	1	0·09	0·09
December	·943	87·0	66·0	11·1	76·3	127·2	12·7	66	N.	.....	.....	.....

TABLE showing the Population and the Number of Births and the Birth-rate by Sex and Section in 1918.

1	2	3			4			5			6	7	8	9		
Ward.	Section.	Population according to the Census of 1911.			Number of Births registered.			Ratio of Births per 1,000 of Population.			Number of male births to 100 female births.	Excess of births over deaths per 1,000 of Population.	Excess of deaths over births per 1,000 of Population.	Mean ratio of births per 1,000 of Population during the previous 5 years.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.				Males.	Females.	Total.
A	Upper Colaba	869	688	1,557	40	47	87	46·02	68·31	55·87	85·10	.....	62·85	58·68	78·48	67·43
	Middle and Lower Colaba	13,514	6,165	19,679	190	176	366	14·05	28·54	18·59	107·95	.....	23·88	10·58	22·06	14·22
	Fort, South	2,825	637	3,462	17	20	37	6·01	31·39	10·68	85·00	.....	79·43	3·53	18·83	6·64
	Fort, North	15,564	9,836	25,400	331	282	613	21·26	28·67	24·13	117·37	.....	37·55	19·08	28·97	22·91
	Esplanade	13,544	5,217	17,761	167	140	307	13·31	26·83	17·28	119·28	.....	40·70	9·64	22·04	13·28
B	Mandvi	23,317	9,885	33,202	239	202	441	10·25	20·43	13·28	118·31	.....	44·30	9·64	22·45	13·46
	Chukla	15,768	8,463	24,231	199	197	396	12·62	23·27	16·34	101·01	.....	34·74	14·45	22·15	18·44
	Umarkhadi	28,491	17,188	45,679	727	669	1,396	25·51	38·92	30·56	108·66	.....	40·60	24·70	68·76	25·98
	Dongri	16,985	10,261	27,246	254	231	485	14·95	22·51	17·80	109·95	.....	30·57	13·65	13·84	17·25
C	Market	22,011	8,161	30,172	193	156	349	8·76	19·11	11·56	123·71	.....	33·64	7·13	18·99	10·34
	Dhobi Talao	24,670	14,014	38,684	447	432	879	18·11	30·82	22·72	103·47	.....	31·83	17·38	29·25	21·71
	Fanaswadi	18,125	9,278	27,403	253	262	515	13·95	28·23	18·79	96·56	.....	40·26	16·22	32·98	21·93
	Bhuleshwar	24,713	11,746	36,459	353	298	651	14·28	25·37	17·85	118·45	.....	34·09	12·74	24·77	16·62
	Khara Talao	15,052	7,927	22,979	294	269	563	19·53	33·93	24·50	109·29	.....	32·46	16·80	33·05	22·41
	Kumbharwada	17,908	9,795	27,703	340	325	665	18·98	33·18	24·00	104·61	.....	39·34	16·58	30·32	21·44
D	Khetwadi	19,850	12,087	31,937	430	374	804	21·66	30·94	25·17	114·97	.....	26·64	18·79	28·79	22·57
	Girgaum	19,156	11,623	30,779	363	374	737	18·94	32·17	23·94	97·05	.....	33·98	18·32	27·87	21·93
	Chowpati	7,088	4,309	11,397	161	135	296	22·71	31·32	25·97	119·25	.....	17·89	17·91	30·16	22·54
	Walkeshwar	6,883	3,757	10,640	157	127	284	22·80	33·80	26·69	123·62	.....	22·65	17·43	28·74	21·42
	Mahalakshmi	16,608	9,694	26,302	358	325	683	21·55	33·52	25·96	110·15	.....	28·81	19·86	32·18	24·40
E	Mazagon	19,398	10,677	30,075	427	377	804	22·01	35·30	26·73	113·26	.....	45·95	19·58	34·84	25·00
	Tarwadi	18,141	10,283	28,424	453	416	869	24·97	40·45	30·57	108·89	.....	60·33	22·15	45·51	30·60
	2nd Nagpada	13,321	8,379	21,700	259	256	515	19·44	30·55	23·73	101·17	.....	47·14	20·56	29·71	24·05
	Kamathipura	22,523	14,228	36,751	426	391	817	18·91	27·48	22·23	108·95	.....	48·70	18·02	28·46	22·04
	Tardeo	17,241	10,517	27,758	419	372	791	24·30	35·37	28·49	112·63	.....	29·08	20·93	30·52	24·56
	Byculla	47,672	27,676	75,348	970	933	1,903	20·34	33·71	25·25	103·96	.....	48·07	20·17	31·79	24·44
	1st Nagpada	4,182	2,232	6,414	81	69	150	19·36	30·91	23·38	117·39	.....	21·82	22·47	34·49	26·50
F	Parel	28,858	16,616	45,474	483	436	919	16·73	26·23	20·20	110·77	.....	40·22	16·45	26·23	20·03
	Sewri	11,841	7,226	19,067	254	201	455	21·45	27·81	23·86	126·36	.....	40·12	19·50	28·78	23·02
	Sion	18,463	12,217	30,680	434	382	816	23·50	31·26	26·59	113·61	.....	55·57	22·53	32·60	26·53
G	Mahim	18,271	12,221	30,492	563	461	1,024	30·81	37·72	33·58	122·12	.....	32·46	24·79	38·54	30·27
	Worli	58,473	31,138	89,611	1,129	987	2,116	19·30	31·69	23·61	114·38	.....	40·27	17·01	30·25	21·61
	Harbour, Docks, Railway and Homeless	39,963	5,016	44,979	.....	.....	.....	.....	.....	.....	.....	.....	5·11	.....	.....	.....
	Total	640,288	339,157	979,445	11,411	10,322	21,733	17·82	30·43	22·18	110·55	.....	37·42	16·25	29·58	20·86

TABLE of Deaths and the Death-rate from some of the Principal Diseases by Sections in 1918.

1	2	3	4	5			6			7	8																9		
				Population by the Census of 1911.			Number of deaths registered.				Death-rate per 1,000 of Population.													All Causes			Mean ratio of death per 1,000 of Population during the previous 5 years.		
Ward	SECTION	Area in square miles.	Average Population per square mile calculated on the Census Population of 1911.	Males.	Females.	Total.	Males.	Females.	Total.	Number of deaths to males among every 100 deaths among females	Cholera.	Small-pox.	Measles.	Plague.	Malaria.	Enteric.	Other Fevers.	Diarrhœa and Dysentery.	Tuberculosis.	Phthisis.	Other Respiratory Diseases.	Injuries.	All other causes.	Males.	Females.	Total.	Males.	Females.	Total.
A	Upper Colaba ...	·22	7,077	869	688	1,557	115	70	185	164·28	30·21	5·13	...	1·92	...	3·21	1·28	5·78	3·21	10·27	38·25	1·92	54·59	132·38	101·74	118·81	72·49	37·79	57·16
	Middle and Lower Colaba ...	·45	43,731	13,514	6,165	19,679	486	350	836	138·85	4·67	1·32	·66	4·11	·20	·40	·71	·81	·20	1·62	10·01	·60	17·12	35·96	56·75	42·48	22·27	34·71	26·17
	Fort, South ...	·21	16,485	2,825	637	3,462	284	28	312	1014·28	2·02	1·73	·28	1·73	1·15	·23	1·15	4·04	3·46	22·53	20·79	1·73	27·44	100·53	43·95	90·12	48·84	25·11	44·19
	Fort, North ...	·21	120,952	15,564	9,836	25,400	869	698	1,567	124·49	3·37	2·23	·66	3·54	·59	·39	3·54	1·73	·55	3·70	20·03	·82	20·51	55·83	70·96	61·59	30·71	35·58	32·59
	Esplanade ...	1·04	17,077	12,544	5,217	17,761	765	265	1,030	288·67	1·23	·84	·16	1·06	·73	·90	2·19	2·36	1·57	4·50	19·93	1·17	21·28	60·98	50·79	57·99	36·59	28·36	34·23
B	Mandvi ...	·26	127,700	23,317	9,885	33,202	1,025	887	1,912	115·55	·45	1·32	·36	2·19	·21	·15	4·27	1·29	·24	2·25	33·13	·51	11·17	43·95	89·73	57·58	23·54	42·08	30·57
	Chukla ...	·08	302,887	15,768	8,463	24,231	673	565	1,238	119·11	·20	·70	·82	1·56	·16	...	1·52	·94	·24	1·32	27·23	·33	16·01	42·68	66·76	51·09	27·96	43·48	33·38
	Umarkhadi ...	·16	285,493	28,491	17,188	45,679	1,660	1,591	3,251	104·33	·26	·21	·41	·96	·08	·02	6·98	3·65	·15	1·97	26·33	·70	28·74	58·26	92·56	71·17	35·41	47·63	39·90
	Dongri ...	·45	69,546	16,985	10,261	27,246	704	614	1,318	114·65	·47	·28	·11	·51	·18	...	6·60	3·37	·14	·69	18·20	·29	17·47	41·44	59·83	48·37	24·43	29·43	26·35
C	Market ...	·14	215,514	23,011	8,161	30,172	817	547	1,364	149·36	·99	·95	·92	1·98	·23	·26	1·39	1·42	·19	·89	24·89	·72	10·30	37·11	67·02	45·20	18·99	34·79	23·26
	Dhobi Talao ...	·16	241,775	24,670	14,014	38,684	1,151	959	2,110	120·02	2·71	1·18	·98	1·13	·33	·10	3·59	1·93	·43	1·16	22·68	·50	17·86	46·65	68·43	54·54	24·80	35·46	28·64
	Fanaswadi ...	·20	137,015	18,125	9,278	27,403	855	763	1,618	112·05	4·05	·61	1·82	1·05	·25	·18	4·70	1·86	·14	1·09	25·69	·65	16·89	47·17	82·23	59·04	21·84	36·43	26·74
	Bhuleshwar ...	·12	303,825	24,713	11,746	36,459	1,011	883	1,894	114·49	·30	·10	·79	1·42	·10	·02	5·04	2·66	·16	·60	20·26	·54	19·94	40·90	75·17	51·94	25·89	41·12	31·67
	Khara Talao ...	·07	338,271	15,052	7,927	22,979	688	621	1,309	110·78	·21	·47	·52	1·44	...	·04	2·34	1·87	·21	2·87	21·23	·39	25·32	45·70	78·33	56·96	30·09	22·03	26·90
	Kumbharwada ...	·07	395,757	17,908	9,795	27,703	943	812	1,755	116·13	1·37	·97	·97	2·02	·14	...	6·93	2·16	·18	2·41	21·23	·68	24·65	52·65	82·89	63·35	28·19	41·75	32·99
D	Khetwadi ...	·27	118,285	19,850	12,087	31,937	845	810	1,655	104·32	2·41	1·28	·50	·68	·18	·12	4·97	1·34	·43	2·53	25·33	·56	17·69	42·56	67·01	51·82	24·40	33·25	27·80
	Girgaum ...	·20	153,895	19,156	11,623	30,779	939	844	1,783	111·25	3·60	1·85	·58	·94	...	·16	4·58	1·52	·58	3·21	21·73	·51	18·61	49·01	72·61	57·92	24·53	35·10	28·49
	Chowpati ...	·17	67,041	7,088	4,369	11,397	246	254	500	96·85	1·93	1·66	·43	1·14	·26	·52	3·07	1·22	·43	1·57	15·00	·35	16·32	34·70	58·94	43·87	20·59	31·09	24·65
	Walkeshwar ...	·85	12,517	6,883	3,757	10,640	316	209	525	151·19	6·57	·84	·18	·65	·09	...	2·25	1·40	·09	1·50	19·54	1·22	14·94	45·91	55·62	49·34	21·21	30·07	24·34
	Mahalakshmi ...	1·00	26,302	16,608	9,694	26,302	798	643	1,441	124·16	1·82	1·10	·60	1·14	·07	·11	1·63	3·91	·30	2·31	26·27	·57	14·14	48·04	65·32	54·78	26·31	31·05	26·34
E	Mazagon ...	·96	31,328	19,393	10,677	30,075	1,215	971	2,186	125·12	1·23	1·33	·06	1·06	·13	·09	5·58	7·21	·06	·36	28·36	·73	26·43	62·63	90·94	72·68	30·72	41·02	34·38
	Tarwadi ...	·75	37,898	18,141	10,283	28,424	1,572	1,012	2,584	155·33	1·40	1·47	·03	1·19	·63	·14	5·34	7·45	·94	3·58	35·25	2·25	31·17	86·65	98·41	90·71	45·53	51·93	47·84
	2nd Nagpada ...	·05	434,000	13,321	8,379	21,700	811	727	1,538	111·55	·27	1·47	·78	·27	·04	·09	3·04	2·35	·18	5·62	33·73	·73	22·25	60·88	86·76	70·87	34·90	48·81	40·27
	Kamathipura ...	·10	367,510	22,533	14,228	36,751	1,377	1,230	2,607	111·95	·40	1·11	·46	1·06	...	·05	4·84	2·69	·13	6·85	30·09	·51	22·42	61·13	86·44	70·93	32·89	47·93	38·72
	Tardeo ...	·36	77,105	17,241	10,517	27,758	875	722	1,597	121·19	·61	·97	1·36	1·15	·14	...	2·44	1·80	·21	5·08	27·63	·39	15·70	50·75	68·65	57·53	28·59	40·03	32·92
	Byculla ...	·80	94,185	41,672	27,676	75,348	2,974	2,551	5,525	116·58	1·77	2·13	·31	·88	·09	·07	1·81	2·91	·15	·82	24·83	·66	36·80	62·88	92·17	78·32	39·73	46·06	36·86
	1st Nagpada ...	·05	128,280	4,182	2,232	6,414	165	125	290	132·00	46	·93	·15	·15	·46	...	2·33	2·18	...	2·18	21·82	·62	13·87	39·45	56·00	45·21	24·39	33·60	27·59
F	Parel ...	·86	52,876	28,858	16,616	45,474	1,505	1,243	2,748	121·07	3·67	·76	·08	·81	·15	·08	5·67	1·95	·15	·43	29·75	·48	16·38	52·15	74·80	60·43	25·60	35·56	29·24
	Sewri ...	·77	24,762	11,841	7,226	19,067	669	551	1,220	121·41	2·77	·05	·10	·47	·05	...	6·55	3·72	·05	·47	30·83	·78	17·46	56·49	76·25	63·98	26·85	35·01	29·99
	Sion ...	6·66	4,606	18,463	12,217	30,680	1,645	876	2,521	187·78	3·12	·81	·09	1·10	·74	·22	7·13	6·19	·45	6·81	29·69	·88	24·86	89·09	71·70	82·17	30·49	54·78	32·20
G	Mahim ...	2·01	15,170	18,271	12,221	30,492	1,091	923	2,014	118·20	·42	·62	·32	·98	·19	·03	5·44	5·41	·19	2·06	27·25	·81	22·26	59·71	75·52	66·05	30·59	39·93	34·33
	Worli ...	2·84	31,553	58,473	13,138	89,611	3,127	2,598	5,725	120·36	2·05	·71	·41	·98	·26	·03	7·73	4·14	·05	1·81	23·65	·55	21·63	53·47	83·43	63·88	25·32	38·73	29 98
	Harbour, Docks, Railways and Homeless ...	...	...	39,963	5,016	44,979	228	2	230	11400·00	·26	·22	·02	·02	·33	·11	·28	·17	·04	·20	2·02	·28	1·11	5·70	·39	5·11	3·17	·79	2·91
	Total ...	22·55	43,453	640,288	339,157	979,445	32,444	25944	58,388	125·05	1·69	1·04	·49	1·16	·20	·12	4·31	2·85	·27	2·29	23·97	.65	20·50	50·67	76·49	59·61	26·61	38·97	30·89

TABLE of Deaths registered by Section and Month in 1918.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total No. of deaths registered in 1918.
A	Upper Colaba	9	15	12	8	9	10	16	10	14	53	12	17	185
	Middle and Lower Colaba	79	53	64	75	38	43	54	38	71	150	47	124	836
	Fort, South	25	23	25	31	31	36	36	14	15	38	11	27	312
	Fort, North	115	77	114	130	104	104	121	92	174	261	87	188	1,567
	Esplanade	56	51	59	42	58	66	91	55	99	272	76	105	1,030
B	Mandvi	106	115	146	161	125	82	120	75	362	374	115	131	1,912
	Chukla	83	84	121	119	89	88	96	62	123	212	71	90	1,238
	Umarkhadi	225	232	276	247	191	199	238	173	426	631	193	220	3,251
	Dongri	68	79	95	86	54	61	94	57	238	275	89	120	1,318
C	Market	104	105	116	108	72	84	81	76	226	226	69	97	1,364
	Dhobi Talao	191	128	134	155	124	134	145	92	253	406	112	236	2,110
	Fanaswadi	134	91	96	134	87	76	100	76	220	285	86	233	1,618
	Bhuleshwar	129	129	180	183	133	122	122	84	251	337	112	112	1,894
	Khara Talao	106	88	132	113	96	92	86	57	166	231	66	76	1,309
	Kumbharwada	162	96	118	129	100	96	101	82	310	328	91	142	1,755
D	Khetwadi	116	76	119	115	107	105	107	75	230	346	81	178	1,655
	Girgaum	125	97	118	122	86	108	138	75	212	397	87	218	1,783
	Chowpati	37	20	30	37	37	37	32	30	60	102	28	50	500
	Walkeshwar	26	32	23	34	24	26	30	26	63	120	30	91	525
	Mahalakshmi	76	87	102	93	85	92	113	72	160	367	64	130	1,441
E	Mazagon	125	103	161	137	123	92	152	104	414	414	125	236	2,186
	Tarwadi	149	142	162	175	136	120	188	134	520	437	153	268	2,584
	2nd Nagpada	91	116	123	114	115	125	124	85	183	268	97	98	1,538
	Kamathipura	145	175	195	240	171	154	174	128	356	555	128	186	2,607
	Tardeo	92	88	107	99	105	99	138	79	230	327	87	146	1,597
	Byculla	340	377	393	392	253	312	411	265	842	1,131	281	528	5,525
	1st Nagpada	13	18	22	15	15	16	20	21	43	65	16	25	290
F	Parel	139	129	188	220	144	149	215	120	338	564	122	420	2,748
	Sewri	65	59	77	76	78	82	74	54	196	254	56	149	1,220
	Sion	130	113	115	144	121	118	203	123	322	594	224	314	2,521
G	Mahim	99	92	131	128	103	129	174	106	250	512	121	169	2,014
	Worli	343	337	443	450	290	301	417	253	731	1,258	262	640	5,725
	Harbour, Docks, Railways and Homeless	16	13	10	11	15	12	11	7	12	60	43	20	230
	Total	3,719	3,440	4,207	4,323	3,319	3,370	4,222	2,800	8,110	11,850	3,242	5,786	58,388

TABLE of Deaths registered from all Causes by Section and Age-period in 1918.

1	2	3		4		5		6		7		8		9		10		11		12		13		14		15
Ward.	SECTION.	Under 1 year.		1 year and under 5 years.		5 years and under 10 years.		10 years and under 15 years.		15 years and under 20 years.		20 years and under 30 years.		30 years and under 40 years.		40 years and under 50 years.		50 years and 60 years		60 years and upwards.		Unspecified Age.		Total.		Total.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
A	Upper Colaba ...	11	18	9	3	...	4	2	3	6	9	35	15	30	7	13	3	4	4	5	6	...	...	115	70	185
	Middle and Lower Colaba ...	87	78	46	55	16	16	15	12	38	19	119	82	64	31	46	13	30	15	25	29	...	...	486	350	836
	Fort, South ...	1	4	2	2	1	1	3	...	44	1	161	4	45	2	18	7	6	4	3	3	...	...	284	28	312
	Fort, North ...	158	144	81	92	32	23	38	26	52	64	190	120	131	85	88	45	52	41	47	58	...	...	869	698	1,567
	Esplanade ...	63	42	23	31	11	10	9	10	66	23	271	56	172	89	92	24	39	20	19	10	...	...	765	265	1,030
B	Mandvi ...	225	229	120	118	28	34	30	36	68	90	217	168	143	53	78	55	65	55	51	49	...	...	1,025	887	1,912
	Chukla ...	151	130	94	81	16	18	21	27	36	58	100	106	66	44	70	28	62	28	57	45	...	...	673	565	1,238
	Umarkhadi ...	411	424	238	260	54	80	39	56	93	109	308	236	189	157	132	71	99	72	97	126	...	...	1,660	1,591	3,251
	Dongri ...	160	182	72	117	41	24	28	24	40	44	135	93	92	45	56	21	40	29	40	35	...	...	704	614	1,318
C	Market ...	177	114	77	73	20	18	30	26	72	62	175	113	103	52	68	36	54	24	41	29	...	...	817	547	1,364
	Dhobi Talao ...	218	209	129	137	30	25	27	39	107	66	213	191	164	95	107	76	81	46	74	85	1	...	1,151	959	2,110
	Fanaswadi ...	150	171	99	134	26	33	33	25	55	66	170	139	102	62	104	47	63	32	53	54	...	...	855	763	1,618
	Bhuleshwar ...	260	204	104	124	31	25	25	52	62	85	159	166	130	68	84	45	65	36	89	78	2	...	1,011	883	1,894
	Khara Talao ...	141	146	95	87	15	24	19	33	51	66	120	118	85	50	56	19	58	22	48	56	...	...	688	621	1,309
	Kumbharwada ...	206	183	139	128	34	42	24	33	56	74	173	145	137	67	77	33	52	43	45	64	...	...	943	812	1,755
D	Khetwadi ...	189	158	95	116	23	32	17	27	63	78	157	166	111	78	77	39	54	46	59	70	...	...	845	810	1,655
	Girgaum ...	221	180	121	91	26	34	21	36	57	93	176	165	127	86	82	47	55	37	53	75	...	...	939	844	1,783
	Chowpati ...	51	48	24	26	16	16	12	12	13	24	46	47	28	28	19	19	19	9	18	25	...	...	246	254	500
	Walkeshwar ...	57	42	30	23	8	7	4	7	18	15	61	53	44	27	31	13	32	11	31	11	...	...	316	209	525
	Mahalakshmi ...	161	144	95	106	37	40	16	30	50	57	175	102	84	40	76	34	52	37	52	53	...	...	798	643	1,441
E	Mazagon ...	279	260	125	126	45	48	40	41	71	57	249	203	153	89	108	28	83	56	61	63	1	...	1,215	971	2,186
	Tarwadi ...	357	236	133	107	39	46	29	39	110	94	389	197	302	114	138	72	105	55	70	52	...	...	1,572	1,012	2,584
	2nd Nagpada ...	203	166	108	130	33	35	22	34	41	71	148	118	100	57	51	29	42	30	63	57	...	...	811	727	1,538
	Kamathipura ...	316	261	201	226	44	53	37	45	78	105	299	211	159	105	97	61	77	68	69	95	...	...	1,377	1,230	2,607
	Tardeo ...	186	188	114	115	28	33	25	31	53	44	182	123	126	74	58	35	50	31	53	48	...	...	875	722	1,597
	Byculla ...	734	697	379	351	129	130	83	110	207	220	584	401	335	233	215	113	160	152	147	144	1	...	2,974	2,551	5,525
	1st Nagpada ...	36	12	22	39	3	13	4	2	13	9	32	24	20	13	11	5	12	8	12	10	...	...	165	125	290
F	Parel ...	518	278	154	173	55	70	36	56	109	102	337	232	188	90	116	61	95	63	96	118	1	...	1,505	1,243	2,748
	Sewri ...	175	131	93	79	17	27	18	19	32	32	134	104	72	51	35	20	44	34	49	54	...	...	669	551	1,220
	Sion ...	199	195	111	113	34	30	27	35	152	48	606	262	261	77	116	50	52	48	79	78	8	...	1,645	876	2,521
G	Mahim ...	260	201	145	147	57	60	39	30	60	64	180	164	120	91	89	52	71	31	70	83	...	...	1,091	923	2,014
	Worli ...	691	602	381	429	122	165	111	98	276	162	644	487	371	236	210	121	161	111	160	187	..	...	3,127	2,598	5,725
	Harbour, Docks, Railway and Homeless	...	..	...	1	...	...	5	...	25	...	84	...	70	...	24	...	15	...	5	1	...	...	228	2	230
	Total ...	6,752	6,077	3,659	3,820	1,071	1,216	889	1,054	2,274	2,111	7,029	4,749	4,324	2,346	2,642	1,322	1,949	1,298	1,841	1,951	14	...	32,444	25,944	58,388
	Total ...	12,829		7,479		2,287		1,943		4,385		11,778		6,670		3,964		3,247		3,792		14		58·388		...
	Percentage to Total Mortality ...	21·97		12·80		3·92		3·32		7·51		20·17		11·42		6·78		5·56		6·49		·02		.....		...

TABLE showing the Population, the Number of Deaths from all Causes and the

1	2	3													
		Population by the Census of 1911.													
Ward.	SECTION.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Other and Unknown Castes.	Total.
A	Upper Colaba ...	15	68	...	...	521	533	98	104	4	113	45	56	...	1,557
	Middle and Lower Colaba ...	149	169	69	2	11,094	1,690	1,190	1,085	170	1,760	223	2,037	41	19,679
	Fort, South ...	...	31	7	...	1,460	247	166	96	93	821	55	486	...	3,462
	Fort, North ...	800	1,075	2	1,497	7,779	1,358	1,440	9,692	12	1,378	155	167	45	25,400
	Esplanade ...	1	270	...	32	6,004	5,556	3,019	503	55	967	248	1,062	44	17,761
B	Mandvi ...	2,562	2,387	16	1,659	20,360	194	5,217	9	541	186	8	20	43	33,202
	Chukla ...	765	690	...	160	7,383	34	15,082	74	...	34	...	9	...	24,231
	Umarkhadi ...	1,158	351	8	60	11,916	788	29,280	38	1,371	640	39	22	8	45,679
	Dongri ...	351	250	38	8	22,092	1,222	2,571	24	436	166	13	72	3	27,246
C	Market ..	4,489	3,514	91	2,112	14,082	75	3,415	1,306	...	1,111	62	28	37	30,172
	Dhobi Talao ...	881	2,547	52	1,166	16,226	1,308	1,015	8,619	1	6,461	98	263	12	38,684
	Fanaswadi ...	520	5,104	28	46	16,162	796	502	2,005	2	2,181	7	41	9	27,403
	Bhuleshwar ...	1,949	5,084	...	79	17,194	29	11,377	715	...	28	1	3	...	36,459
	Khara Talao ...	471	173	26	6	5,967	158	15,938	171	28	40	1	...	...	23,979
	Kumbharwada ...	391	847	161	33	23,016	38	2,822	326	3	65	1	...	...	27,703
D	Khetwadi ...	167	3,443	49	111	15,727	245	3,643	7,326	36	1,087	25	62	16	31,937
	Girgaum ...	378	10,079	36	32	18,184	48	295	582	1	1,010	74	60	...	30,779
	Chowpati ...	191	2,266	...	45	7,224	2	331	859	5	444	4	25	1	11,397
	Walkeshwar ...	275	1,023	14	170	5,888	269	677	1,117	14	831	27	271	64	10,640
	Mahalakshmi ...	34	1,933	18	119	17,191	694	887	4,049	16	1,228	2	131	...	26,302
E	Mazagon ...	237	411	7	...	18,487	1,235	4,562	1,243	35	3,114	292	413	39	30,075
	Tarwadi ...	200	547	20	6	18,914	1,502	3,080	990	600	1,219	667	678	1	28,424
	2nd Nagpada ...	67	66	...	...	5,309	905	14,690	82	374	196	1	7	3	21,700
	Kamathipura ...	264	825	75	19	21,268	5,432	7,742	174	137	528	64	51	72	36,751
	Tardeo ...	246	810	8	4	12,652	4,209	4,859	3,815	72	884	96	29	74	27,758
	Byculla ...	783	1,348	30	3	42,470	7,331	16,556	833	906	2,720	904	961	3	75,348
	1st Nagpada ...	120	347	4	...	2,796	50	1,233	46	808	606	282	121	1	6,414
F	Parel ...	592	1,356	113	28	36,596	1,785	2,192	1,681	96	829	89	111	6	45,474
	Sewri ...	201	212	19	...	16,172	919	992	42	7	423	18	62	...	19,067
	Sion ...	459	1,849	30	238	19,459	3,085	2,412	728	21	2,191	92	114	2	30,680
G	Mahim ...	410	1,230	54	31	20,498	927	3,609	550	40	2,913	103	125	2	30,492
	Worli ...	915	2,374	189	46	65,875	8,666	4,859	1,918	683	3,393	294	399	...	89,611
	Harbour, Docks, Railways, and Homeless.	319	977	15	68	21,276	2,405	15,560	229	30	1,706	198	4,008	188	44,979
	Total ...	20,466	53,656	1,179	7,780	547,192	54,235	179,346	50,931	6,597	41,273	4,188	11,894	714	979,445

Death-Rate per 1,000 of Population by Caste and Section in 1918.

4														5											
Number of Deaths from all Causes excluding Still-born.														Death-Rate per 1,000 of Population amongst :—											
Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Other and Unknown Castes.	Total.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Other and Unknown Castes.	Total.
...	3	...	...	37	55	14	...	...	13	1	62	...	185	...	44·11	...	...	71·01	103·18	142·85	...	...	115·04	22·22	...	.....	118·81
9	6	1	...	496	141	51	18	2	46	16	49	1	836	60·40	35·50	14·49	...	44·70	83·43	42·85	16·58	11·76	26·13	71·74	24·05	24·39	42·48
...	2	...	...	181	13	69	3	2	14	5	17	6	312	.....	65·51	...	...	123·97	52·63	415·66	31·25	21·50	17·05	90·90	34·97	.....	90·12
131	36	...	72	540	273	112	277	1	92	19	13	1	1,567	163·75	33·48	..	48·09	69·41	201·03	77·27	28·58	83·33	66·76	122·58	77·84	22·22	61·59
3	12	...	...	480	191	217	6	1	47	10	58	5	1,030	.. ...	44·44	...	...	79·94	34·35	71·87	11·92	18·18	48·60	40·32	54·61	113·63	57·99
343	174	...	77	945	26	309	...	23	10	1	1	3	1,912	133·87	72·89	...	46·41	46·41	82·47	59·22	...	42·51	83·76	125·00	50·00	69·76	57·58
128	15	...	13	238	2	836	3	2	1	...	...	...	1,238	167·32	21·75	...	81·25	32·25	58·82	55·43	40·54	...	29·41	...	...	.....	51·09
92	10	3	1	750	300	1,997	1	68	27	...	1	1	3,251	79·44	28·47	375·00	16·66	62·94	380·77	68·23	26·31	49·59	42·18	...	45·45	125·00	71·17
36	6	...	...	817	278	156	1	11	4	1	4	4	1,318	102·56	24·00	...	...	36·98	227·49	60·67	41·66	25·22	24·09	76·92	55 55	.....	48·37
382	153	2	54	526	4	167	12	...	58	3	2	1	1,364	84·87	43·54	21·97	25·56	37·48	53·33	48·90	9·95	...	52·20	48·38	71·42	27·02	45·20
101	102	...	47	937	205	76	243	...	392	3	....	4	2,110	114·64	40·04	...	40·30	57·74	156·72	74·87	28·19	...	60·67	30·61	...	333·33	54·54
106	278	2	3	934	112	26	48	...	107	1	...	1	1,618	203·84	54·46	71·42	65·21	57·78	140·70	50·17	23·94	...	49·06	142·85	...	111·11	59·04
386	183	...	6	579	26	697	14	...	2	...	...	1.	1,894	198·05	35·99	...	75·94	33·66	896·55	61·26	19·58	...	71·42	...	...	.....	51·94
34	9	2	...	262	94	904	2	1	1	...	...	...	1,309	72·18	52·02	76·92	...	43·90	594·93	56·71	11·69	35·71	25·00	...	...	.....	56·96
69	48	19	...	1,337	99	171	7	...	3	...	...	2	1,755	176·47	56·67	118·01	...	58·09	...	60·59	21·47	...	46·15	...	...	.....	63·35
90	167	2	10	861	29	198	242	1	42	3	6	4	1,655	538·92	48·50	40·81	90·09	54·74	118·36	54·35	33·03	27·77	38·63	120·00	96·77	250·00	51·82
73	404	2	2	1,196	10	26	17	...	52	...	...	2	1,783	193·12	40·08	55·55	62·50	65·77	208·33	88·13	29·20	...	51·48	...	...	.....	57·93
23	44	...	6	350	3	18	31	...	21	...	1	3	500	120·41	19·41	...	133·33	48·44	...	54·38	36·06	...	47·29	...	40 00	.....	43·87
13	29	...	13	377	12	9	54	...	9	...	7	2	525	47·27	28·34	...	76·47	64·53	144·60	13·29	48·54	...	10·83	...	25·83	31·25	49·34
14	68	1	7	878	279	51	107	1	20	...	15	...	1,441	411·76	35·69	55·55	58·82	51·07	402·01	57·49	26·42	62·50	16·28	...	114·50	.....	54·78
22	22	7	...	1,226	387	336	35	...	133	11	6	1	2,186	92·82	53·50	1,000·00	...	66·31	313·36	73·65	28·15	...	42·71	57·67	14·52	25·64	72·63
29	32	...	1	1,692	193	405	24	25	135	15	20	13	2,584	145·00	58·56	...	166·66	89·45	128·49	131·49	24·24	41·66	63·70	22·48	29·49	.....	90·71
8	2	1	...	214	359	926	2	14	11	...	1	...	1,538	119·40	30·30	...	...	40·30	385·63	63·03	24·39	37·43	56·12	...	142·55	.....	70·87
28	45	174	...	1,266	666	379	3	6	26	4	2	8	2,6 7	76·92	54·42	...	...	59·52	122·60	48·95	17·24	43·79	49·24	62·50	39·21	111·11	70·93
37	30	3	1	545	521	291	119	1	36	3	2	8	1,197	150·40	37·03	375·00	250·00	43·07	123·78	59·88	31·19	13·88	40·72	31·25	68·96	108·10	57·53
80	66	13	...	2,424	1,194	1,202	22	46	351	49	39	9	5,525	102·29	48·96	433·33	...	57·07	152·47	72·60	26·41	50·77	140·07	54·20	40·58	.....	73·32
3	23	...	...	109	17	76	...	24	30	5	3	...	290	25·00	66·28	...	...	38·98	340·00	61·63	...	39·70	4 9·50	17·73	24·79	.....	45·31
47	55	12	3	2,020	374	169	31	5	24	2	6	...	27·8	79·59	40·56	106·19	107·14	56·19	209·46	77·09	18·44	52·08	28·95	22·47	54·05	.....	60·43
9	15	4	...	943	136	96	...	...	12	2	2	1	1,220	44·77	70·75	210·53	...	58·81	147·98	96·77	...	...	28·86	111·11	32·25	.....	63·98
34	69	3	8	1,424	462	327	22	1	143	3	4	31	2,521	74·07	37·31	100·00	33·61	73·17	146·51	135·87	30·21	47·16	65·26	32·60	35·48	.....	82·17
23	88	3	2	950	529	252	7	1	153	2	4	...	2,014	56·09	71·54	55·55	64·51	40·34	570·65	69·82	12·72	25·00	52·52	19·41	32·00	.....	66·05
82	125	121	...	3,523	1,304	307	50	29	160	16	4	4	5,725	89·61	52·65	640·21	...	53·48	150·47	63·18	26·06	42·45	47·15	54·42	10·02	.....	63·88
...	...	...	...	86	...	103	...	...	10	1	17	13	230	.....	...	...	...	4·04	...	7·59	...	...	5·86	5·05	4·24	69·14	5·11
2,435	2,321	375	326	29,142	8,284	10,973	1,401	285	2,215	176	346	129	58,388	119·01	43·25	318·06	41·90	53·25	152·74	61·18	27·50	40·20	53·66	42·02	31·76	18·06	59·61

TABLE of Deaths registered from CHOLERA by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Females.	Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	...	...	...	...	...	...	...	...	...	...	2	3	...	...	5	...	...	30·21	·64
	Middle and Lower Colaba	16	2	...	...	1	...	...	3	...	...	...	70	...	...	92	...	...	4·67	·40
	Fort, South	...	...	...	...	...	...	...	...	...	...	...	7	...	...	7	...	...	2·02	.....
	Fort, North	24	...	...	...	...	...	1	1	...	...	...	60	...	...	86	...	...	3·37	·23
	Esplanade	2	...	...	...	...	...	1	...	1	...	...	18	...	...	22	...	...	1·23	·22
B	Mandvi	5	...	...	...	...	...	...	...	...	...	...	10	...	...	15	...	...	·45	·06
	Chukla	1	2	...	...	...	...	...	...	...	...	...	2	...	...	5	...	...	.20	·06
	Umarkhadi	4	...	...	...	1	...	...	...	...	...	...	7	...	...	12	...	...	.26	·10
	Dongri	...	...	...	...	...	...	...	...	...	...	...	13	...	...	13	...	...	·47	·11
C	Market	5	...	...	...	...	...	...	...	...	...	...	25	...	...	30	...	...	·99	·16
	Dhobi Talao	35	1	...	...	...	...	1	1	...	...	...	67	...	...	105	...	...	2·71	·18
	Fanaswadi	13	1	1	...	...	...	...	...	...	...	...	96	...	...	111	...	...	4·05	·10
	Bhuleshwar	1	1	...	...	...	...	...	...	...	...	...	9	...	...	11	...	...	3·9	·05
	Khara Talao	4	...	...	...	...	...	...	...	...	...	...	1	...	...	5	...	...	·21	·18
	Kumbharwada	11	1	...	...	...	...	...	...	...	...	...	26	...	...	38	...	...	1·37	·14
D	Khetwadi	5	1	...	...	...	...	...	...	...	...	1	70	...	...	77	...	...	2·41	·07
	Girgaum	20	4	...	...	...	...	...	...	...	...	...	87	...	...	111	...	...	3·60	·09
	Chowpati	4	...	...	...	...	...	...	...	...	...	...	18	...	...	22	...	...	1·93	·17
	Walkeshwar	4	...	...	...	...	...	...	...	...	...	...	66	...	...	70	...	...	6·57	.....
	Mahalakshmi	2	1	...	...	...	...	...	1	...	...	3	41	...	...	48	...	...	1·82	·07
E	Mazagon	...	...	...	...	...	...	...	...	...	...	...	37	...	...	37	...	...	1·23	·16
	Tarwadi	4	...	...	...	...	...	...	2	...	...	...	34	...	...	40	...	...	1·40	·10
	2nd Nagpada	...	...	...	...	...	...	...	...	...	...	...	6	...	...	6	...	...	·27	·04
	Kamathipura	3	1	...	...	...	...	...	...	...	...	...	11	...	...	15	...	...	·40	·05
	Tardeo	1	...	...	...	...	...	...	1	...	...	...	15	...	...	17	...	...	·61	·07
	Byculla	5	1	...	1	1	2	1	...	...	...	...	123	...	...	134	...	...	1·77	·13
	1st Nagpada	1	...	...	...	...	...	...	...	...	...	...	2	...	...	3	...	...	·46	.....
F	Parel	1	...	...	...	...	...	...	...	...	...	...	166	...	...	167	...	...	3·67	·13
	Sewri	...	...	...	...	...	...	...	...	...	...	...	53	...	...	53	...	...	2·77	·10
	Sion	...	...	...	...	...	2	2	...	...	...	...	92	...	...	96	...	...	3·12	·19
G	Mahim	...	...	...	...	...	...	1	...	...	...	...	12	...	...	13	...	...	·42	·09
	Worli	1	1	...	...	...	...	1	...	...	...	...	181	...	...	184	...	...	2·05	·26
	Harbour, Docks, Railways and Homeless	1	...	...	...	...	...	...	1	2	...	...	8	...	...	12	...	...	·26	·11
	Total	173	17	1	1	3	4	8	10	3	...	6	1,436	1,121	541	1,662	1·75	1·59	1·69	·11

TABLE of Deaths registered from SMALL-POX by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.			Death Ratio per 1,000 of Population.			Mean Ratio per 1,000 of Population during the previous 5 years.
														Males.	Females.	Total.	Males.	Females.	Total.	
A	Upper Colaba	...	1	2	...	...	2	...	...	...	1	...	2	...	...	8	...	...	5·13	·64
	Middle and Lower Colaba	2	2	6	10	4	2	...	...	...	...	...	...	...	...	26	...	...	1·32	·50
	Fort, South	...	...	2	2	2	...	...	...	...	..	...	...	...	...	6	...	...	1·73	·28
	Fort, North	1	9	16	17	11	1	1	...	...	...	...	...	...	...	56	...	...	2·28	·62
	Esplanade	2	5	5	2	1	...	...	...	...	...	...	...	...	...	15	...	...	·84	·28
B	Mandvi	3	18	10	7	4	1	1	...	...	...	...	...	...	...	44	...	...	1·32	·24
	Chukla	1	4	7	1	1	2	1	...	...	...	...	...	...	...	17	...	...	·70	·08
	Umarkhadi	1	14	13	9	2	1	...	...	...	...	...	...	...	...	40	...	...	·21	·13
	Dongri	...	1	3	2	2	...	...	...	...	...	...	...	...	...	8	...	...	·28	·14
C	Market	1	3	13	4	2	5	1	...	...	...	...	...	...	...	29	...	...	·95	·36
	Dhobi Talao	2	14	12	13	2	2	1	...	...	...	...	...	...	...	46	...	...	1·18	·72
	Fanaswadi	4	7	3	1	2	...	...	...	...	...	...	...	...	...	17	...	...	·61	·47
	Bhuleshwar	...	1	2	...	1	...	...	...	...	...	...	...	...	...	4	...	...	·10	·08
	Khara Talao	...	...	5	4	2	...	...	...	...	...	...	...	...	...	11	...	...	·47	·13
	Kumbharwada	2	5	3	7	8	...	...	1	...	...	...	1	...	...	27	...	...	·97	·28
D	Khetwadi	1	4	16	10	5	4	1	...	...	...	...	...	...	...	41	...	...	1·28	·50
	Girgaum	3	10	25	15	2	1	1	...	...	...	...	...	...	...	57	...	...	1·85	·71
	Chowpati	...	1	2	6	7	2	...	...	1	...	...	...	...	...	19	...	...	1·66	·35
	Walkeshwar	...	3	...	3	3	...	...	...	...	...	...	...	...	...	9	...	...	·84	·18
	Mahalakshmi	2	9	6	4	5	2	1	...	...	...	...	...	...	...	29	...	...	1·10	·34
E	Mazagon	1	8	10	11	7	3	...	...	...	...	...	...	...	...	40	...	...	1·33	·43
	Tarwadi	...	13	18	9	1	...	...	...	...	...	...	1	...	...	42	...	...	1·47	·59
	2nd Nagpada	5	8	16	2	1	...	...	...	...	...	...	...	...	...	32	...	...	1·47	·55
	Kamathipura	3	13	17	3	1	2	1	...	1	...	...	...	...	...	41	...	...	1·11	·89
	Tardeo	1	3	14	3	2	2	...	2	...	...	...	...	...	...	27	...	...	·97	·61
	Byculla	11	47	65	24	10	3	1	...	...	...	...	...	...	...	161	...	...	2·13	·63
	1st Nagpada	1	2	2	...	1	...	...	...	...	...	...	...	...	...	6	...	...	·93	·46
F	Parel	3	5	9	8	8	2	...	...	...	...	...	...	...	...	35	...	...	·76	·54
	Sewri	1	...	8	1	2	1	...	...	...	...	...	...	...	...	13	...	...	·05	·41
	Sion	1	3	7	7	3	2	2	...	...	...	...	...	...	...	25	...	...	·81	·45
G	Mahim	...	3	5	2	1	2	4	...	...	...	...	2	...	..	19	...	...	·62	·42
	Worli	7	24	15	8	6	2	2	...	...	...	...	...	...	...	64	...	...	·71	·51
	Harbour, Docks, Railways and Homeless	2	3	2	2	1	...	...	...	...	...	...	...	...	...	10	...	...	·22	·13
	Total	61	243	339	197	110	44	18	3	2	1	...	6	651	373	1,024	1·09	1·01	1·04	·43

TABLE of Deaths registered from MEASLES by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Middle and Lower Colaba	...	3	5	4	1	...	...	...	...	...	...	...	...	...	18	...	...	·66	·20
	Fort, South	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	·28	...
	Fort, North	2	6	5	3	1	...	...	...	...	...	...	...	...	...	17	...	...	·66	·11
	Esplanade	1	1	1	...	...	...	...	...	...	...	...	...	...	...	3	...	...	·16	·05
B	Mandvi	1	2	5	1	...	3	...	...	...	...	...	...	...	...	12	...	...	·36	·24
	Chukla	1	3	13	...	1	1	...	...	1	...	...	...	...	...	20	...	...	·82	·28
	Umarkhadi	1	9	7	1	1	...	...	...	...	...	...	...	...	...	19	...	...	·41	·26
	Dongri	1	1	...	...	1	...	...	...	...	...	...	...	...	...	3	...	...	·11	·18
C	Market	...	4	9	10	1	1	1	...	1	...	1	...	...	...	28	...	...	·92	·29
	Dhobi Talao	4	9	12	5	5	3	...	...	...	...	...	...	...	...	38	...	...	·98	·31
	Fanaswadi	4	8	13	17	5	3	...	...	...	...	...	...	...	...	50	...	...	1·82	·47
	Bhuleshwar	...	4	12	5	6	...	1	1	...	...	...	...	...	...	29	...	...	·79	·10
	Khara Talao	2	3	6	...	...	1	...	...	...	...	...	...	...	...	12	...	...	·52	·21
	Kumbharwada	5	4	6	2	5	1	...	...	...	...	2	2	...	...	27	...	...	·97	·36
D	Khetwadi	...	...	5	3	3	2	2	...	...	...	...	1	...	...	16	...	...	·50	·18
	Girgaum	...	1	3	5	6	2	1	...	...	...	...	...	...	...	18	...	...	·58	·25
	Chowpati	...	...	2	...	2	1	...	...	...	...	...	...	...	...	5	...	...	·43	·08
	Walkeshwar	...	...	1	1	...	...	...	...	...	...	...	...	...	...	2	...	...	·18	·09
	Mahalakshmi	...	...	1	4	5	5	1	...	...	...	...	...	...	...	16	...	...	·60	·22
E	Mazagon	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2	...	...	·06	·13
	Tarwadi	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	·03	·21
	2nd Nagpada	1	...	...	6	7	3	...	...	...	...	...	...	...	...	17	...	...	·78	·27
	Kamathipura	...	1	4	11	1	...	...	...	...	...	...	...	...	...	17	...	...	·46	·21
	Tardeo	...	1	5	7	10	7	1	...	...	...	7	...	...	...	38	...	...	1·36	·28
	Byculla	7	2	6	1	4	3	...	...	...	1	...	...	...	...	24	...	...	·31	·23
	1st Nagpada	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	·15	·31
F	Parel	2	...	1	1	...	...	...	...	...	...	...	...	...	...	4	...	...	·08	·15
	Sewri	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2	...	...	·10	·05
	Sion	1	...	...	...	...	...	1	...	...	...	...	1	...	...	3	...	...	·09	·19
G	Mahim	...	1	1	4	1	...	...	...	...	1	...	2	...	...	10	...	...	·32	·26
	Worli	7	6	8	7	4	1	2	...	1	...	...	1	...	...	37	...	...	·41	·39
	Harbour, Docks, Railways, and Homeless	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	·02	...
	Total	41	69	132	99	72	40	10	1	3	2	3	14	239	247	486	.37	.72	·49	·22

TABLE of Deaths registered from PLAGUE by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Death Ratio per 1,000 of Population. Females.	Death Ratio per 1,000 of Population. Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	...	..	...	1	2	...	...	...	...	...	...	...	...	...	3	...	...	1·92*	2·56
	Middle and Lower Colaba	11	3	21	20	8	8	3	3	1	1	2	...	...	...	81	...	...	4·11	5·38
	Fort, South	2	...	...	3	..	1	...	...	...	...	...	...	...	...	6	...	...	1·73	2·02
	Fort, North	...	...	8	27	24	17	9	1	2	1	...	1	...	...	90	...	...	3·54	2·36
	Esplanade	1	2	6	2	3	3	1	...	...	...	1	...	...	...	19	...	...	1·06	1·06
B	Mandvi	2	5	16	33	9	4	2	...	1	...	1	...	...	...	73	...	...	2·19	3·16
	Chukla	3	3	2	18	6	6	...	...	...	...	...	...	...	...	38	...	...	1·56	1·98
	Umarkhadi	2	4	12	16	5	4	...	...	...	...	...	1	...	...	44	...	...	·96	2·07
	Dongri	...	2	2	6	...	2	1	...	1	...	...	...	...	...	14	...	...	·51	1·90
C	Market	5	5	9	17	12	8	3	...	...	...	...	1	...	...	60	...	...	1·98	1·92
	Dhobi Talao	...	...	4	22	7	8	...	1	2	...	...	...	...	...	44	...	...	1·13	1·62
	Fanaswadi	1	3	3	14	3	3	1	...	1	...	...	...	...	...	29	...	...	1·05	1·71
	Bhuleshwar	1	7	8	18	10	5	1	...	1	1	...	...	...	...	52	...	...	1·42	1·91
	Khara Talao	...	4	2	12	12	3	...	...	...	...	...	...	...	...	33	...	...	1·44	1·74
	Kumbharwada	2	...	8	22	10	3	...	1	...	...	...	...	...	...	46	...	...	2·02	1·98
D	Khetwadi	3	2	3	5	4	4	1	...	...	...	...	...	...	...	23	...	...	·68	1·15
	Girgaum	4	...	2	9	1	11	2	...	...	...	...	...	...	...	29	...	...	·94	1·07
	Chowpati	1	...	...	7	2	3	...	...	...	...	...	...	...	...	13	...	...	1·14	·87
	Walkeshwar	1	...	1	2	1	2	...	...	...	...	...	...	...	...	7	...	...	·65	1·97
	Mahalakshmi	6	5	8	5	4	2	...	...	...	...	...	...	...	...	30	...	...	1·14	2·58
E	Mazagon	2	1	5	16	7	...	1	...	...	...	...	...	...	...	32	...	...	1·06	2·56
	Tarwadi	4	4	6	9	5	4	1	1	...	...	...	...	...	...	34	...	...	1·19	2·32
	2nd Nagpada	...	2	1	2	...	1	...	...	...	...	...	...	...	...	6	...	...	·27	1·05
	Kamathipura	...	5	5	14	9	3	2	1	...	...	...	...	...	...	39	...	...	1·06	1·74
	Tardeo...	1	5	5	7	4	4	4	2	...	...	...	...	...	...	32	...	...	1·15	1·65
	Byculla	5	11	8	21	8	6	1	4	2	1	...	...	...	...	67	...	...	·88	1·88
	1st Nagpada	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	·15	·93
F	Parel	4	1	8	10	7	5	1	...	1	...	...	...	...	...	37	...	...	·81	2·72
	Sewri	...	...	...	2	...	6	1	...	...	...	...	...	...	...	9	...	...	·47	2·77
	Sion	4	3	3	14	2	3	3	1	...	...	...	1	...	...	34	...	...	1·10	2·44
G	Mahim	3	1	1	7	7	4	3	3	1	...	...	...	...	...	30	...	...	·98	3·01
	Worli	3	9	28	23	6	11	2	1	2	1	...	2	...	...	88	...	...	·98	2·48
	Harbour, Docks, Railways, and Homeless	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	·02	·06
	Total	71	87	185	385	179	144	43	19	15	5	4	6	835	308	1,143	1·30	·90	1·16	2·00

TABLE of Deaths Registered from MALARIA by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·92
	Middle and Lower Colaba	...	1	...	...	1	...	2	...	...	...	...	...	...	...	4	...	...	·20	·40
	Fort, South	...	...	...	...	...	...	2	...	...	1	...	1	...	...	4	...	...	1·15	2·02
	Fort, North	1	...	1	3	1	2	1	1	...	1	...	4	...	...	15	...	...	·59	·47
	Esplanade	1	...	2	...	1	3	...	...	1	2	1	2	...	...	13	...	...	·73	1·29
B	Mandvi	...	1	1	1	...	...	...	...	3	...	1	...	...	...	7	...	...	·21	·29
	Chukla	...	...	...	1	...	...	...	...	1	...	1	1	...	...	4	...	...	·16	·24
	Umarkhadi	...	1	2	...	...	1	...	...	...	...	...	...	...	...	4	...	...	·08	·19
	Dongri	...	...	...	...	...	1	...	1	1	1	1	...	...	...	5	...	...	·18	·18
C	Market	1	2	1	1	1	...	...	...	1	...	...	...	...	...	7	...	...	·23	·36
	Dhobi Talao	2	1	2	2	1	...	1	...	...	1	1	2	...	...	13	...	...	·33	·33
	Fanaswadi	...	...	2	2	...	1	...	1	...	1	...	...	...	...	7	...	...	·25	·18
	Bhuleshwar	...	1	...	1	1	...	...	...	1	...	...	...	...	...	4	...	...	·10	·18
	Khara Talao	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·17
	Kumbharwada	...	1	...	...	...	...	...	...	2	...	...	1	...	...	4	...	...	·14	·10
D	Khetwadi	...	...	2	1	...	...	...	...	1	1	1	...	...	...	6	...	...	·13	·25
	Girgaum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·19
	Chowpati	...	...	...	...	...	...	...	1	...	...	1	1	...	...	3	...	...	·26	·17
	Walkeshwar	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	·09	·37
	Mahalakshmi	...	...	...	1	1	...	...	...	...	...	...	...	...	...	2	...	...	·07	·19
E	Mazagon	1	...	...	...	1	...	...	1	...	...	1	...	...	...	4	...	...	·13	·19
	Tarwadi	5	...	...	2	2	1	1	1	1	1	2	2	...	...	18	...	...	·63	·66
	2nd Nagpada	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	·04	·13
	Kamathipura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·08
	Tardeo	1	1	...	...	...	1	...	...	1	...	...	...	...	...	4	...	...	·14	·14
	Byculla	1	1	...	...	...	1	...	1	1	...	2	...	...	...	7	...	...	·09	·17
	1st Nagpada	...	...	...	...	1	2	...	...	...	...	...	...	...	...	3	...	...	·46	·15
F	Parel	...	...	...	3	2	...	...	...	...	1	...	1	...	...	7	...	...	·15	·24
	Sewri	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	·05	·10
	Sion	3	3	2	2	2	1	3	...	2	2	3	...	...	...	23	...	...	·74	·32
G	Mahim	...	1	...	1	...	...	1	...	1	...	1	1	...	...	6	...	...	·19	·09
	Worli	...	...	3	1	...	1	...	...	1	2	...	...	...	...	8	...	...	·26	·26
	Harbour, Docks, Railways, and Homeless	2	...	1	...	4	4	2	...	1	...	1	...	...	...	15	...	...	·33	·11
	Total	18	14	20	22	19	19	14	7	19	15	17	16	140	60	200	·21	·17	·20	·24

TABLE of Deaths registered from ENTERIC FEVER by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	...	1	...	1	...	...	1	...	1	1	...	...	...	...	5	...	...	3·21	1·28
	Middle and Lower Colaba	1	1	...	3	1	1	1	...	...	...	...	...	...	...	8	...	...	·40	·25
	Fort, South	1	1	...	...	1	1	1	...	1	...	...	...	...	...	6	...	...	·23	1·73
	Fort, North	1	1	1	...	1	...	2	1	1	1	1	...	...	...	10	...	...	·39	·51
	Esplanade	1	2	...	...	1	1	3	2	1	2	1	2	...	...	16	...	...	·90	·56
B	Mandvi	...	...	...	2	...	1	...	1	1	...	...	...	...	...	5	...	...	·15	·12
	Chukla	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·04
	Umarkhadi	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	·02	·10
	Dongri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·03
C	Market	...	2	2	...	...	...	...	4	...	...	...	...	...	...	8	...	...	·26	·19
	Dhobi Talao	2	...	...	1	...	...	...	1	...	...	...	...	...	...	4	...	...	·10	...
	Fanaswadi	...	...	1	1	...	...	1	...	2	...	...	...	...	...	5	...	...	·18	·18
	Bhuleshwar	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	·02	·08
	Khara Talao	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	·04	·08
	Kumbharwada	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·03
D	Khetwadi	...	1	...	...	...	...	...	1	1	1	...	...	...	...	4	...	...	·12	·28
	Girgaum	...	1	1	...	...	...	3	...	...	...	...	...	...	...	5	...	...	·16	·29
	Chowpati	...	...	1	...	2	3	...	...	...	...	...	...	...	...	6	...	...	·52	·43
	Walkeshwar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·09
	Mahalakshmi	...	...	...	...	...	1	...	...	...	2	...	...	...	...	3	...	...	·11	·26
E	Mazagon	...	...	...	...	1	...	...	1	...	1	...	...	...	...	3	...	...	·09	·13
	Tarwadi	1	1	...	1	...	...	...	1	...	...	...	...	...	...	4	...	...	·14	·17
	2nd Nagpada	1	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	...	·09	·04
	Kamathipura	...	...	1	...	...	...	...	1	...	...	...	...	...	...	2	...	...	·05	·02
	Tardeo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·18
	Byculla	1	...	2	1	...	...	...	2	...	...	...	...	...	...	6	...	...	·07	·09
	1st Nagpada	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·15
F	Parel	...	...	1	...	1	...	1	...	...	...	...	1	...	...	4	...	...	·08	·04
	Sewri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.....
	Sion	...	...	1	1	...	...	...	2	2	1	...	...	...	...	7	...	...	·22	·13
G	Mahim	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	·03	·13
	Worli	...	...	1	...	...	...	2	...	...	...	...	...	...	...	3	...	...	·03	·05
	Harbour, Docks, Railways and Homeless	2	...	...	1	...	...	1	...	...	1	...	...	...	...	5	...	...	·11	·11
	Total	11	11	13	14	8	8	16	17	11	10	2	4	92	33	125	.14	.09	·12	·15

TABLE of Deaths registered from FEVERS (excluding MALARIA and ENTERIC FEVER) by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	...	...	...	...	...	1	...	...	1	...	...	...	...	...	2	...	...	1·28	1·28
	Middle and Lower Colaba	1	1	...	...	1	3	...	1	2	...	2	3	...	...	14	...	...	·71	1·47
	Fort, South	...	1	...	...	...	...	...	1	...	...	...	2	...	...	4	...	...	1·15	·86
	Fort, North	6	4	8	8	3	8	4	13	13	11	4	8	...	...	90	...	...	3·54	2·32
	Esplanade	4	...	5	3	...	3	5	2	6	5	5	1	...	..	39	...	...	2·19	3·32
B	Mandvi	7	11	11	12	20	2	6	10	23	23	13	4	...	...	142	...	...	4·27	1·89
	Chukla	1	1	1	4	4	3	5	1	3	5	3	6	...	...	37	...	...	1·52	1·36
	Umarkhadi	12	9	15	20	22	21	34	12	73	47	28	26	...	...	319	...	...	6·98	2·69
	Dongri	4	12	11	5	4	4	14	7	58	34	11	16	...	...	180	...	...	6·60	3·45
C	Market	5	3	6	4	6	3	2	2	4	2	3	2	...	...	42	...	...	1·39	1·52
	Dhobi Talao	7	6	9	10	9	18	16	...	33	17	4	10	...	...	139	...	...	3·59	1·34
	Fanaswadi	7	2	3	10	10	12	15	4	41	9	4	12	...	...	129	...	...	4·70	1·56
	Bhuleshwar	8	10	15	13	12	8	13	11	32	43	13	6	...	...	184	...	...	5·04	1·23
	Khara Talao	13	4	4	6	5	2	4	2	3	5	3	3	...	...	54	...	...	2·34	1·47
	Kumbharwada	26	9	10	15	7	6	21	7	39	39	4	11	...	...	192	...	...	6·93	1·69
D	Khetwadi	7	9	9	16	14	15	13	10	28	22	4	12	...	...	159	...	...	4·97	1·53
	Girgaum	10	7	9	13	7	12	24	7	14	20	7	11	...	...	141	...	...	4·58	2·04
	Chowpati	...	1	8	2	3	3	6	3	3	...	2	4	...	...	35	...	...	3·07	1·22
	Walkeshwar	3	1	1	4	...	2	3	2	3	3	1	1	...	...	24	..	...	2·25	·93
	Mahalakshmi	1	5	3	4	2	2	6	1	4	8	2	5	...	...	43	...	...	1·63	1·29
E	Mazagon	10	6	10	8	7	3	1	5	48	35	16	19	...	...	168	...	...	5·58	5·32
	Tarwadi	11	12	16	1	7	4	3	6	38	17	18	19	...	...	162	...	...	5·34	5·27
	2nd Nagpada	3	6	10	4	14	6	13	2	6	1	...	1	...	...	66	...	...	3·04	2·02
	Kamathipura	12	9	15	22	18	10	16	10	32	9	11	14	...	...	178	...	...	4·84	3·88
	Tardeo	4	3	1	7	6	4	8	2	8	18	2	5	...	...	68	...	...	2·44	1·51
	Byculla	9	1	6	5	6	6	13	5	45	17	11	14	...	...	137	...	...	1·81	1·72
	1st Nagpada	1	3	5	...	3	1	...	...	1	...	1	...	...	...	15	...	...	2·33	1·40
F	Parel	15	13	17	26	16	13	30	13	31	42	20	22	...	...	258	...	...	5·67	3·43
	Sewri	7	10	6	4	10	5	7	6	33	18	7	12	...	...	125	...	...	6·55	3·46
	Sion	13	10	13	20	7	8	25	10	39	49	12	13	...	...	219	...	...	7·13	2·44
G	Mahim	7	11	15	17	14	7	14	5	22	31	8	15	...	...	166	...	...	5·44	1·93
	Worli	29	31	53	59	27	33	67	38	131	143	30	52	...	...	693	...	...	7·73	2·76
	Harbour, Docks, Railways and Homeless	1	1	1	1	1	...	1	1	2	2	...	2	...	...	13	...	...	·28	·31
	Total	244	212	296	321	265	228	389	199	819	675	249	331	2,316	1,912	4,228	3.61	5.60	4·31	2·17

TABLE of Deaths registered from DIARRHŒA and DYSENTERY by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	1	...	1	...	...	...	1	2	2	1	...	1	...	...	9	...	...	5·78	6·42
A	Middle and Lower Colaba	2	1	2	1	1	1	2	2	...	1	...	3	...	...	16	...	...	·81	1·57
A	Fort, South	2	1	1	3	1	1	...	1	2	1	...	1	...	...	14	...	...	4·04	5·77
A	Fort, North	6	3	6	1	1	1	6	7	5	1	3	4	...	...	44	...	...	1·73	2·24
A	Esplanade	2	3	4	1	6	3	5	4	4	3	2	5	...	...	42	...	...	2·36	4·84
B	Mandvi	3	9	4	4	...	...	1	2	5	7	2	6	...	...	43	...	...	1·29	1·62
B	Chukla	4	5	3	2	1	3	1	2	1	1	...	...	...	...	23	...	...	·94	1·85
B	Umarkhadi	20	15	12	18	14	10	15	19	16	4	12	12	...	...	167	...	...	3·65	3·34
B	Dongri	5	9	11	4	6	3	13	4	6	11	3	17	...	...	92	...	...	3·37	1·98
C	Market	11	7	5	6	2	...	1	5	2	...	1	3	...	...	43	...	...	1·42	1·29
C	Dhobi Talao	13	6	7	3	7	7	10	6	6	...	1	9	...	...	75	...	...	1·93	1·96
C	Fanaswadi	7	6	5	4	6	3	6	1	8	...	1	4	...	...	51	...	...	1·86	1·82
C	Bhuleshwar	14	4	9	9	6	6	13	4	9	11	4	6	...	...	95	...	...	2·60	3·15
C	Khara Talao	4	4	7	2	3	4	6	...	2	6	...	5	...	...	43	...	...	1·87	2·65
C	Kumbharwada	12	5	5	2	3	8	4	4	4	6	2	5	...	...	60	...	...	2·16	2·31
D	Khetwadi	4	1	6	3	2	5	3	2	5	5	2	5	...	...	43	...	...	1·34	1·40
D	Girgaum	6	1	2	2	11	2	1	2	5	3	6	6	...	...	47	...	...	1·52	1·23
D	Chowpati	4	2	...	...	1	3	1	...	1	...	1	1	...	...	14	...	...	1·22	1·40
D	Walkeshwar	4	1	...	3	1	...	...	2	1	1	1	1	...	...	15	...	...	1·40	1·50
D	Mahalakshmi	4	5	11	7	8	6	19	16	10	8	3	6	...	...	103	...	...	3·91	2·62
E	Mazagon	13	9	19	20	8	9	11	16	33	23	9	47	...	...	217	...	...	7·21	4·72
E	Tarwadi	16	12	12	16	16	9	18	8	43	20	9	53	...	...	212	...	...	7·45	6·75
E	2nd Nagpada	8	1	6	4	4	5	3	8	1	1	6	5	...	...	52	...	...	2·35	2·85
E	Kamathipura	12	10	5	18	12	8	9	6	8	5	2	4	...	...	99	...	...	2·69	2·91
E	Tardeo	4	1	3	7	4	5	10	5	4	1	1	5	...	...	50	...	...	1·80	3·45
E	Byculla	14	23	10	14	13	16	25	24	24	17	12	23	...	...	220	...	...	2·91	3·97
E	1st Nagpada	...	...	...	1	1	1	2	3	2	2	1	1	...	...	14	...	...	2·18	2·02
F	Parel	7	6	8	4	6	14	7	2	4	4	5	22	...	...	89	...	...	1·95	2·46
F	Sewri	6	7	6	10	10	7	5	1	1	4	4	10	...	...	71	...	...	3·72	2·33
F	Sion	13	10	9	9	22	17	23	17	19	16	18	17	...	...	190	...	...	6·19	3·45
G	Mahim	6	9	19	14	12	18	19	24	13	15	4	12	...	...	165	...	...	5·41	3·35
G	Worli	30	16	30	46	31	25	38	27	34	20	11	63	...	...	371	...	...	4·14	2·73
	Harbour, Docks, Railways and Homeless	...	1	...	1	1	2	...	...	...	...	3	...	...	...	8	...	...	·17	1·31
	Total	257	193	228	239	220	202	278	226	280	198	129	347	1,575	1,222	2,797	2·45	3·60	2·85	2·76

TABLE of Deaths registered from TUBERCLE OF LUNGS and TUBERCULAR DISEASES by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	1	4	2	1	2	2	1	1	2	2	...	3	...	...	21	...	...	13·48	4·49
	Middle and Lower Colaba	5	7	2	1	5	...	2	4	...	3	4	3	...	...	36	...	...	1·82	1·21
	Fort, South	7	7	8	6	14	19	17	5	2	2	1	3	...	...	91	...	...	26·28	7·53
	Fort, North	9	6	10	8	6	9	13	13	12	8	9	5	...	...	108	...	...	4·25	2·91
	Esplanade	4	4	8	7	9	11	19	9	9	8	4	16	...	...	108	...	...	6·09	3·54
B	Mandvi	11	7	6	6	11	5	4	4	5	8	6	10	...	...	83	...	...	2·49	2·34
	Chukla	3	6	1	5	3	6	...	3	3	2	1	5	...	...	38	...	...	1·56	3·50
	Umarkhadi	8	7	7	5	6	12	9	10	9	3	7	14	...	...	97	...	...	2·12	2·78
	Dongri	2	...	1	2	1	3	2	3	3	2	2	2	...	...	23	...	...	·84	1·06
C	Market	6	5	3	...	1	1	4	2	1	4	1	5	...	...	33	...	...	1·09	1·39
	Dhobi Talao	7	5	7	4	7	2	5	7	6	5	3	4	...	...	62	...	...	1·60	1·52
	Fanaswadi	3	4	4	1	3	1	2	5	...	2	3	6	...	...	34	...	...	1·24	1·38
	Bhuleshwar	1	3	3	4	3	4	2	1	3	1	...	3	...	...	28	...	...	·76	1·09
	Khara Talao	5	3	8	8	5	7	9	7	10	1	3	5	...	...	71	...	...	3·08	3·04
	Kumbharwada	6	1	4	4	9	7	4	5	12	6	7	7	...	...	72	...	...	2·59	2·45
D	Khetwadi	10	6	8	11	8	2	6	4	18	8	6	8	...	...	95	...	...	2·97	2·72
	Girgaum	14	10	6	8	3	11	17	8	15	7	7	11	...	...	117	...	...	3·80	2·46
	Chowpati	1	...	...	3	...	2	1	5	3	1	3	4	...	...	23	...	...	2·01	2·28
	Walkeshwar	...	1	...	2	1	2	1	4	...	4	1	1	...	...	17	...	...	1·59	1·69
	Mahalakshmi	8	4	6	8	4	2	8	12	11	15	6	5	...	...	89	...	...	3·38	1·97
E	Mazagon	...	...	1	2	...	1	...	1	3	2	1	2	...	...	13	...	...	·43	·53
	Tarwadi	4	7	4	16	15	8	16	9	21	11	10	8	...	...	129	...	...	4·53	3·02
	2nd Nagpada	10	17	13	13	16	14	13	5	6	1	10	7	...	...	125	...	...	5·76	4·95
	Kamathipura	16	19	30	15	13	23	26	21	31	22	12	29	...	...	257	...	...	5·99	5·61
	Tardeo	12	9	8	9	15	15	12	9	16	16	15	11	...	...	147	...	...	5·29	3·27
	Byculla	4	2	6	5	11	10	10	5	6	2	7	6	...	...	74	...	...	·98	1·28
	1st Nagpada	...	...	1	3	...	1	...	2	1	...	2	4	...	...	14	...	...	2·18	2·88
F	Parel	4	4	...	...	...	1	4	4	2	2	3	3	...	...	27	...	...	·59	·94
	Sewri	2	1	...	1	...	1	...	2	1	2	...	...	...	...	10	...	...	·52	·57
	Sion	9	11	6	11	10	12	21	27	34	38	25	19	...	...	223	...	...	7·26	1·48
G	Mahim	6	3	2	5	4	5	9	3	13	9	5	5	...	...	69	...	...	2·26	1·54
	Worli	15	13	13	12	15	15	13	15	20	12	10	15	...	...	168	...	...	1·87	1·48
	Harbour, Docks, Railways and Homeless	...	...	2	1	...	1	...	1	3	2	1	...	...	...	11	...	...	·24	·17
	Total	193	176	180	187	200	215	250	216	281	211	175	229	1,414	1,099	2,513	2·20	3·24	2·56	1·99

TABLE of Deaths registered from RESPIRATORY DISEASES (excluding Phthisis) by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba ...	1	2	1	1	...	2	5	1	2	24	3	2	...	...	44	...	...	28·25	12·20
	Middle and Lower Colaba	10	15	12	18	4	12	20	6	18	53	15	14	...	...	197	...	...	10·01	7·01
	Fort, South	5	8	6	10	2	4	6	2	2	14	3	10	...	...	72	...	...	20·79	8·37
	Fort, North	25	25	39	29	33	34	45	26	67	100	32	54	...	...	509	...	...	20·93	8·58
	Esplanade	21	16	13	18	16	17	32	15	40	106	29	33	...	...	354	...	...	19·93	7·54
B	Mandvi	44	42	60	52	38	43	77	32	285	293	61	67	...	...	1,100	...	...	33·13	11·56
	Chukla	39	29	61	54	41	34	55	28	76	168	39	41	...	...	660	...	...	27·23	12·21
	Umarkhadi	96	80	91	97	68	66	74	56	183	262	60	75	...	...	1,203	...	...	26·33	12·87
	Dongri	32	31	31	37	20	25	30	16	106	101	27	40	...	...	496	...	...	18·20	9·98
C	Market	37	47	43	46	29	43	45	35	175	173	41	37	...	...	751	...	...	24·89	8·02
	Dhobi Talao	60	44	37	49	42	47	58	28	133	264	40	68	...	...	870	...	...	22·68	8·89
	Fanaswadi	51	30	33	42	29	29	33	32	107	214	48	56	...	...	704	...	...	25·69	7·99
	Bhuleshwar	45	45	67	59	41	42	42	27	124	181	36	30	...	...	739	...	...	20·26	10·45
	Khara Talao	44	33	43	31	28	36	35	12	67	102	33	24	...	...	488	...	...	21·23	10·83
	Kumbharwada	48	37	42	36	23	32	29	29	111	117	36	47	...	...	587	...	...	21·23	11·55
D	Khetwadi	35	28	34	21	28	30	47	23	103	191	30	39	...	...	609	...	...	25·33	8·17
	Girgaum	31	21	36	46	31	27	48	25	96	241	28	39	...	...	669	...	...	21·73	8·57
	Chowpati	9	6	6	12	9	11	11	6	27	57	9	8	...	...	171	...	...	15·00	5·87
	Walkeshwar	3	11	13	7	6	10	11	9	38	75	15	10	...	...	208	...	...	19·54	6·67
	Mahalakshmi	35	33	38	32	33	39	42	22	82	273	29	33	...	...	691	...	...	26·27	6·99
E	Mazagon	55	43	74	51	61	40	66	29	137	161	60	76	...	...	853	...	...	28·36	10·40
	Tarwadi	55	54	67	68	47	41	66	47	219	185	57	96	...	...	1,002	...	...	35·25	12·24
	2nd Nagpada	27	45	40	33	31	60	47	34	125	204	44	42	...	...	732	...	...	33·73	13·62
	Kamathipura	52	63	66	103	65	64	61	48	147	285	65	87	...	...	1,106	...	...	30·09	12·02
	Tardeo	32	27	44	40	33	38	57	19	149	226	41	61	...	...	767	...	...	27·63	9·99
	Byculla	116	125	126	148	76	97	136	82	380	351	89	145	...	...	1,871	...	...	24·83	12·28
	1st Nagpada	5	7	4	7	5	7	9	5	27	45	7	12	...	...	140	...	...	21·82	8·26
F	Parel	52	60	87	107	68	75	120	49	222	313	59	141	...	...	1,353	...	...	29·75	9·85
	Sewri	29	24	39	26	41	37	34	23	111	167	17	40	...	...	588	...	...	30·83	9·12
	Sion	86	35	41	47	37	42	70	29	149	291	64	70	...	...	911	...	...	29·69	7·69
G	Mahim	29	33	51	40	29	53	58	25	120	271	55	67	...	...	831	...	...	27·25	10·62
	Worli	117	115	175	147	108	97	139	69	286	644	92	131	...	...	2,120	...	...	23·65	9·27
	Harbour, Docks, Railways and Homeless	1	3	2	2	4	2	2	1	4	42	23	6	...	...	91	...	...	2·02	·40
	Total	1,277	1,217	1,520	1,516	1,120	1,242	1,610	890	3,918	6,189	1,287	1,701	13,060	10,427	23,487	20·39	30·74	23·97	9·42

TABLE of Deaths registered from INJURIES by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	...	1	...	...	...	1	...	...	...	...	1	...	...	...	3	...	...	1·92	7·70
	Middle and Lower Colaba	1	1	...	2	1	2	...	1	3	...	...	1	...	...	12	...	...	·60	·60
	Fort, South	...	...	...	1	2	1	1	...	...	1	...	...	...	...	6	...	...	1·73	6·64
	Fort, North	1	...	1	6	...	2	1	1	1	4	2	2	...	...	21	...	...	·82	·86
	Esplanade	2	...	4	...	2	5	2	2	1	2	...	1	...	...	21	...	...	1·17	2·64
B	Mandvi	...	...	3	3	1	1	1	4	...	1	2	1	...	...	17	...	...	·51	·48
	Chukla	...	1	1	1	1	...	...	2	...	1	1	...	...	...	8	...	...	·33	·41
	Umarkhadi	3	3	5	2	1	3	3	3	3	1	3	2	...	...	32	...	...	·70	·52
	Dongri	...	2	...	...	...	...	1	1	...	1	1	2	...	...	8	...	...	·29	·62
C	Market	2	1	1	3	2	2	...	4	...	2	3	2	...	...	22	...	...	·72	·56
	Dhobi Talao	2	3	...	3	2	2	2	4	...	...	2	3	...	...	23	...	...	·50	·56
	Fanaswadi	2	4	...	3	...	1	1	2	...	1	3	1	...	...	18	...	...	·65	·40
	Bhuleshwar	...	...	2	...	3	5	2	2	3	2	1	...	...	...	20	...	...	·54	·52
	Khara Talao	3	1	2	...	...	1	...	...	...	...	1	1	...	...	9	...	...	·39	·60
	Kumbharwada	2	2	...	2	1	2	4	...	...	1	2	3	...	...	19	...	...	·68	·64
D	Khetwadi	3	1	3	2	...	1	1	1	2	1	2	1	...	...	18	...	...	·56	·59
	Girgaum	...	1	2	2	1	1	3	...	...	2	2	2	...	...	16	...	...	·51	·38
	Chowpati	...	...	...	...	...	...	1	...	1	1	1	...	...	...	4	...	...	·85	·70
	Walkeshwar	2	...	...	1	2	...	3	2	1	1	1	...	...	...	13	...	...	1·22	·75
	Mahalakshmi	...	1	3	...	3	3	1	...	2	1	...	1	...	...	15	...	...	·57	·45
E	Mazagon	6	1	2	1	3	1	...	2	2	1	...	3	...	...	22	...	...	·73	·63
	Tarwadi	2	1	4	2	5	5	5	5	5	9	8	13	...	...	64	...	...	2·25	2·35
	2nd Nagpada	1	2	1	2	2	2	...	1	1	1	1	2	...	...	16	...	...	·73	·59
	Kamathipura	1	3	2	3	3	2	3	...	...	...	...	2	...	...	19	...	...	·51	·62
	Tardeo	1	...	1	...	2	1	1	...	1	2	1	1	...	...	11	...	...	·39	·46
	Byculla	4	6	4	6	7	4	1	1	3	5	2	7	...	...	50	...	...	·66	·47
	1st Nagpada	...	...	...	...	1	...	...	2	1	...	...	...	...	...	4	...	...	·62	·93
F	Parel	1	2	2	5	2	1	2	1	...	2	3	1	...	...	23	...	...	·42	·43
	Sewri	2	...	2	...	1	1	...	...	2	2	3	2	...	...	15	...	...	·78	·52
	Sion	3	2	2	2	3	...	3	3	1	4	2	2	...	...	27	...	...	·88	·78
G	Mahim	1	5	1	2	1	1	4	3	2	2	3	...	...	...	25	...	...	·81	·62
	Worli	8	4	6	4	2	4	1	1	9	3	4	4	...	...	50	...	...	·55	·47
	Harbour, Docks, Railways and Homeless	1	4	2	...	1	...	2	1	...	...	2	...	...	...	13	...	...	·28	·57
	Total	54	52	56	58	55	55	49	49	44	54	57	60	439	204	643	·68	·60	·65	·67

TABLE of Deaths registered from OTHER CAUSES by Section and Month in 1918.

1	2	3												4			5			6
Ward.	SECTION.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total. Males.	Total. Females.	Total. Total.	Death Ratio per 1,000 of Population. Males.	Females.	Total.	Mean Ratio per 1,000 of Population during the previous 5 years.
A	Upper Colaba	6	6	6	4	5	2	8	6	6	24	6	6	...	...	85	...	...	54·59	17·98
A	Middle and Lower Colaba	30	16	16	16	10	14	24	18	47	92	24	30	...	...	337	...	...	17·12	7·77
A	Fort, South	7	5	8	6	9	9	9	5	8	19	7	3	...	...	95	...	...	27·44	9·24
A	Fort, North	39	23	19	28	23	30	38	28	73	134	36	50	...	...	521	...	...	20·51	11·65
A	Esplanade	15	18	12	9	20	20	23	21	36	144	33	27	...	...	378	...	...	21·28	9·06
B	Mandvi	30	20	30	40	42	16	28	22	39	42	29	33	...	...	371	...	...	11·17	9·03
B	Chukla	30	30	32	33	31	33	34	26	38	40	26	35	...	...	388	...	...	16·01	12·21
B	Umarkhadi	78	90	111	79	76	81	103	73	142	314	83	83	...	...	1,313	...	...	28·74	15·93
B	Dongri	24	21	36	30	20	23	33	25	63	125	44	32	...	...	476	...	...	17·47	7·88
C	Market	31	26	24	17	16	21	24	24	42	45	19	22	...	...	311	...	...	10·30	7·49
C	Dhobi Talao	57	39	44	43	42	45	51	44	73	119	61	73	...	...	691	...	...	17·86	11·03
C	Fanaswadi	42	26	28	39	29	23	41	31	61	58	27	58	...	...	463	...	...	16·89	10·58
C	Bhuleshwar	59	53	62	73	50	52	48	38	78	98	58	58	...	...	727	...	...	19·94	11·61
C	Khara Talao	31	36	55	49	41	38	32	36	84	117	26	37	...	...	582	...	...	25·32	16·36
C	Kumbharwada	48	31	40	41	34	37	39	35	142	159	38	39	...	...	683	...	...	24·65	11·94
D	Khetwadi	48	23	33	43	43	42	33	34	72	117	35	42	...	...	565	...	...	17·69	11·30
D	Girgaum	37	41	32	22	24	41	38	33	82	124	37	62	...	...	573	...	...	18·61	11·53
D	Chowpati	18	10	11	7	11	9	12	15	24	43	11	14	...	...	185	...	...	16·32	11·23
D	Walkeshwar	9	15	7	11	10	10	11	7	20	36	11	12	...	...	159	...	...	14·94	10·43
D	Mahalakshmi	18	24	26	28	20	30	35	20	51	60	21	39	...	...	372	...	...	14·14	9·61
E	Mazagon	37	35	40	28	27	34	73	49	191	191	38	52	...	...	795	...	...	26·43	9·31
E	Tarwadi	47	38	34	51	38	48	78	54	193	194	49	62	...	...	886	...	...	31·17	14·27
E	2nd Nagpada	35	35	35	48	39	34	48	35	43	60	36	35	...	...	483	...	...	22·25	16·77
E	Kamathipura	46	51	50	51	49	42	56	41	137	234	38	39	...	...	834	...	...	22·42	12·92
E	Tardeo	35	38	26	19	29	22	45	39	51	64	27	41	...	...	436	...	...	15·70	11·81
E	Byculla	163	158	160	166	117	164	223	141	381	737	158	205	...	...	2,773	...	...	36·80	13·73
E	1st Nagpada	5	6	10	2	4	4	9	9	11	18	5	6	...	...	89	...	...	13·87	11·06
F	Parel	50	38	55	56	34	38	50	51	78	200	32	63	...	...	745	...	...	16·38	9·34
F	Sewri	18	17	16	38	12	23	27	22	48	60	25	32	...	...	333	...	...	17·46	9·38
F	Sion	47	36	31	30	36	31	50	34	76	193	100	99	...	...	763	...	...	24·86	12·97
G	Mahim	47	25	36	36	34	39	61	43	78	183	45	52	...	...	679	...	...	26·26	11·34
G	Worli	126	118	111	143	91	112	150	102	247	433	115	191	...	...	1,939	...	...	21·63	9·88
	Harbour, Docks, Railways and Homeless	6	1	1	3	2	2	3	2	...	13	13	4	...	...	50	...	...	1·11	·60
	Total	1,319	1,149	1,237	1,284	1,068	1,169	1,537	1,163	2,715	4,490	1,313	1,636	10,562	9,518	20,080	16·48	28·06	20·50	10·92

COMPARATIVE TABLE of Deaths from some of the PRINCIPAL CAUSES during 1918 and the preceding 5 years.

YEAR.	Cholera.		Small-pox.		Measles.		Plague.		Malaria.		Enteric Fever.		Other Fevers.		Diarrhœa and Dysentery.		Tubercle of Lungs including other Tubercular Diseases.		Respiratory Diseases.		Injuries.		All other Causes.		Total Deaths.	
	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.	No. of deaths.	Rate per 1,000.
1913 ...	125	·12	212	·21	222	·22	2,609	2·66	261	·26	154	·15	2,628	2·68	3,173	3·23	2,152	2·19	8,604	8·78	660	·67	11,006	11·23	31,806	32·47
1914 ...	221	·22	252	·25	263	·26	2,941	3·00	213	·21	147	·15	2,517	2·56	3,102	3·16	1,889	1·92	8,734	8·91	608	·62	10,966	11·19	31,853	32·52
1915 ...	16	·01	359	·36	70	·07	599	·61	208	·21	109	·11	1,774	1·81	2,195	2·24	1,710	1·74	6,776	6·91	606	·61	9,265	9·45	23,681	24·17
1916 ...	141	·14	1,021	1·04	344	·35	1,987	2·02	238	·24	168	·17	1,735	1·77	2,420	2·47	1,902	1·94	9,649	9·85	762	·77	10,207	10 42	30,574	31·21
1917 ..	61	·06	269	·27	221	·22	1,706	1·74	262	·26	170	·17	2,017	2·09	2,591	2·64	2,118	2·16	11,231	11·46	674	·68	12,070	12·32	33,390	34·09
Mean of the preceding 5 years.	113	·11	423	·43	224	·22	1,968	2·00	236	·24	150	·15	2,134	2·17	2,696	2·75	1,954	1·99	8,998	9·18	662	·67	10,703	10·92	30,261	30·89
1918 ...	1,632	1·69	1,024	1·04	486	·49	1,143	1·16	200	·20	125	·12	4,228	4·31	2,797	2·85	2,513	2·56	23,487	23·97	643	·65	20,080	20·50	58,388	59·61

20

SPECIFIC CAUSES of DEATHS in 1918 arranged according to the Nomenclature of Diseases drawn up by the Committee of the Royal College of Physicians of London.

No.	CAUSES OF DEATHS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	GENERAL DISEASES.													
4	Beri-beri	1	...	...	1	4	1	1	3	...	...	...	...	11
5	Cerebrospinal Fever	1	3	...	1	1	1	1	...	3	...	2	...	13
6	Chicken-pox	2	...	4	7	1	...	1	...	...	...	...	...	15
7	Cholera	173	17	1	1	3	4	8	10	3	...	6	1,436	1,662
10	Diphtheria	2	...	...	...	2	...	1	...	...	...	1	...	6
11	Dysentery	116	91	82	86	68	67	111	99	82	46	45	108	1,001
13	Enteric Fever	11	11	13	14	8	8	16	17	11	10	2	4	125
15	Erysipelas	2	2	2	1	3	2	...	...	...	1	1	...	14
20	Gonorrhœa	...	...	...	...	...	...	...	1	...	...	...	...	1
21	Influenza	...	...	...	...	...	19	181	13	926	2,507	236	82	3,964
22	Kala-Azar	...	...	...	...	...	...	...	...	...	1	...	...	1
23	Leprosy	9	6	6	3	6	3	4	10	14	34	18	11	124
25	Malaria	18	14	20	22	19	19	11	7	19	15	17	16	200
	Ague and Remittent Fever	244	212	295	314	264	228	389	199	819	675	249	331	4,219
26	Measles	41	69	132	99	72	40	10	1	3	3	3	14	486
28	Mumps	...	...	...	...	...	1	...	1	1	1	...	...	4
29	Osteo-myelitis	...	1	...	...	...	...	...	...	1	...	...	...	2
30	Phagedæna	...	...	1	...	...	...	...	...	...	...	...	...	1
31	Plague	71	87	185	385	179	144	43	19	15	5	4	6	1,143
33	Pyæmia	...	1	2	...	3	3	...	1	1	...	1	...	12
	Pyæmic Abscess	...	...	...	1	...	1	1	...	...	...	...	...	3
34	Pyrexia of uncertain origin	...	1	1	1	2	1	3	2	3	1	...	...	15
35	Hydrophobia	1	2	1	1	...	...	1	...	2	...	2	1	11
36	Relapsing Fever	...	...	1	7	1	...	...	...	...	...	...	...	9
37	Rheumatic Fever	4	1	...	2	1	2	1	2	4	2	2	4	25
	Rheumatism	4	5	4	4	4	3	2	6	5	2	4	4	47
39	Septicæmia	5	6	7	5	7	2	3	2	3	3	3	3	49
	„ Puerperal	24	23	33	24	18	16	19	28	44	41	23	31	324
	Septic Fever	4	1	2	1	4	...	1	3	2	...	1	...	19
	Other Septic Diseases	2	2	...	2	3	3	3	1	1	3	...	1	21
41	Small-pox	61	243	339	197	110	44	18	3	2	1	...	6	1,024
42	Syphilis	7	2	2	6	2	3	6	3	5	1	1	2	40
	(*b*) „ Secondary	...	1	...	...	...	2	...	1	...	...	...	...	4
	(*c*) „ Inherited	2	...	1	1	...	...	...	1	...	...	1	...	6
	„ Tertiary	2	1	...	...	...	1	1	1	1	..	1	1	9
	Other Syphilitic Diseases	5	...	...	...	...	...	1	4	2	2	1	1	16
	Lues	...	...	2	...	...	...	...	...	...	...	...	...	2
43	Tetanus	11	7	16	13	4	7	7	7	7	4	4	10	97
44	Tuberculosis	14	10	7	11	5	11	16	5	14	7	8	13	121
	Tubercle of Lungs	45	41	49	45	55	51	76	69	63	60	47	54	655
	Other Tubercular Diseases	18	11	6	9	19	21	10	8	17	10	7	10	146
	Scrofula	9	4	2	3	3	7	5	6	5	5	1	4	54
	Tabes mesenterica	...	...	1	...	1	...	1	...	...	...	...	1	4
45	Typhus	...	...	...	...	1	...	...	...	...	...	...	...	1
47	Whooping-cough	2	3	...	2	...	1	1	...	1	1	...	..	11
50	Alcoholism	...	...	2	...	...	1	...	1	...	...	...	1	5
	Delirium tremens	...	...	...	...	...	...	1	...	...	...	...	1	2
61	Anæmia	48	38	48	34	22	40	54	31	61	54	37	57	524
63	„ pernicious	9	6	4	2	7	2	3	4	4	4	3	5	53
64	Chlorosis	...	...	1	...	...	..	...	...	...	...	...	...	1
66	Diabetes	4	8	3	2	7	5	7	3	2	4	2	7	54
	Diabetic Coma	...	...	...	1	...	2	...	1	...	1	...	...	5
	„ Gangrene	1	...	...	...	...	1	...	...	1	...	1	...	4
	„ Carbuncle	...	...	...	...	...	...	...	...	1	...	...	2	3
70	Leucocythæmia	1	...	1	...	...	...	...	...	...	...	...	...	2
71	Lymphadenoma	...	...	...	...	...	...	...	...	...	...	1	...	1
75	Purpura	1	...	1	...	...	...	...	...	...	...	...	...	2
76	Rickets	73	84	117	128	110	118	144	114	160	160	100	155	1,463
	Rachitis	...	...	...	...	...	...	1	...	...	...	...	...	1
77	Scurvy	...	1	...	...	...	1	1	1	...	...	2	...	6
78	Malformations	...	2	..	...	...	...	...	...	2	1	...	...	5
80	New Growth, Malignant	...	...	...	2	2	...	...	1	...	1	1	...	8
81	Cyst	...	1	...	...	1	...	...	...	...	...	...	...	2
82	Effects of parasites	4	4	3	7	1	5	3	1	3	2	1	6	40
	Tumours	3	1	4	2	2	1	1	2	2	3	2	2	25
	Sarcoma	1	...	...	...	...	...	...	1	1	1	1	1	6
	Cancer	8	3	3	11	8	9	4	11	10	6	3	8	84
	Debility	300	270	255	253	217	208	274	258	322	448	260	346	3,411
	Old Age	260	218	200	245	180	222	255	199	366	514	236	346	3,241
	Operation	1	...	...	1	...	...	...	1	1	...	...	...	4

20—*continued.*

SPECIFIC CAUSES of DEATHS in 1918 arranged according to the Nomenclature of Diseases drawn up by the Committee of the Royal College of Physicians of London—*continued.*

No.	CAUSES OF DEATHS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	DISEASES OF THE NERVOUS SYSTEM.													
86	(*b*) Polyneuritis	1	...	...	...	...	...	...	...	..	...	...	1	2
88	Meningitis	7	4	8	5	9	11	7	6	6	6	2	2	73
89	Hæmorrhage from Membranes	...	...	...	...	...	...	...	..	...	...	1	...	1
90	Myelitis	1	...	1	2	1	1	2	...	3	...	...	1	12
	(*b*) Acute anterior Poliomyelitis	...	...	...	1	...	...	...	...	1	...	...	...	2
94	(*b*) Primary lateral Sclerosis	...	...	...	...	...	...	...	...	...	1	...	...	1
100	Abscess (Brain)	...	1	1	...	...	...	...	...	1	...	...	...	3
	Brain Fever	...	...	...	...	...	...	...	...	1	...	...	...	1
101	Hæmorrhage (Brain)	7	9	4	7	7	11	4	7	5	4	1	3	69
102	Congestion („)	....	...	1	...	...	...	1	...	...	...	...	...	2
104	Sclerosis	...	1	...	...	...	...	...	...	...	...	...	...	1
108	Hydrocephalus	...	...	...	...	...	...	...	...	1	...	...	...	1
109	Apoplexy	1	3	3	2	2	1	...	1	2	1	2	...	18
110	Paralysis	7	3	4	4	1	3	5	5	6	6	5	2	51
	(*a*) Paraplegia	...	...	2	3	2	2	2	7	3	5	2	...	28
	(*b*) Hemiplegia	7	9	10	9	11	4	13	12	10	11	7	13	116
	(*c*) Monoplegia	...	...	...	1	...	...	...	...	...	...	1	...	2
115	Chorea	1	..	..	...	...	...	...	1	1	...	...	...	3
123	Convulsions	141	155	200	197	156	183	202	148	332	306	119	168	2,307
	„ Puerperal	1	...	...	1	2	1	...	...	1	2	1	2	11
124	Epilepsy	2	1	...	2	2	2	3	4	3	1	1	2	23
125	Laryngismus Stridulus	...	1	...	...	...	...	...	...	1	...	...	...	2
126	Tetany	...	...	...	...	...	...	...	...	...	...	...	1	1
131	Neuralgia	...	...	...	...	...	1	...	...	...	...	...	...	1
133	Hysteria	...	2	...	1	...	...	1	...	...	1	...	...	5
145	Mania	...	...	...	...	1	...	...	...	...	...	...	..	1
	(*b*) „ Puerperal	...	...	...	...	...	...	...	...	...	...	...	2	2
146	Melancholia	...	...	...	...	...	...	...	1	...	...	...	1	2
147	Insanity	...	...	2	...	...	...	...	...	...	...	...	...	2
154	Acute delirium	...	...	...	...	...	...	...	...	...	1	...	...	1
165	Dementia	...	...	1	...	...	...	...	...	1	...	...	...	2
	Nervous exhaustion	1	...	...	...	...	1	...	...	...	...	...	...	2
	Coma	...	...	...	...	...	1	...	...	...	...	...	...	1
	DISEASES OF THE EYE, EAR & NOSE													
259	Inflammation of the External Ear	...	...	...	1	...	...	...	...	...	...	...	...	1
265	„ „ Mastoid cells	...	...	...	...	1	...	1	1	..	...	...	...	3
	Mastoid Abscess	...	...	1	...	...	...	...	...	...	...	...	...	1
277	Rhinitis	...	...	...	...	...	1	...	...	...	...	...	...	1
280	Epistaxis	1	...	...	1	...	1	...	...	1	...	...	1	5
	DISEASES OF THE CIRCULATORY SYSTEM.													
286	Pericarditis	...	...	...	1	1	...	...	...	...	...	2	1	5
289	Hydropericardium	..	1	...	...		...	...	...	...	...	...	...	1
292	Endocarditis	1	1	...	1	...	1	...	...	...	1	...	1	6
293	Valvular Disease	6	3	11	2	3	6	2	2	1	6	5	1	48
	(1) Mitral	1	...	2	2	2	5	...	...	...	...	...	...	12
	(2) Aortic	...	1	...	...	...	...	1	...	...	...	...	1	3
	(*d*) Stenosis of Orifice	1	...	1	...	...	...	1	2	...	...	...	...	5
	Heart Disease	10	12	6	15	6	5	11	5	11	12	13	16	122
	Weak Heart	...	...	...	...	1	...	1	...	...	...	...	...	2
	Cardiac Failure	7	10	7	9	9	9	6	9	16	11	7	5	105
	„ Asthma	...	...	...	1	1	...	1	...	...	...	...	...	3
	„ Dropsy	...	1	...	...	...	...	...	...	...	...	...	...	1
295	(*a*) Fatty Degeneration of Heart	1	...		...	...	...	...	...	...	...	...	1	2
	(*e*) Calcareous „ „ „	...	...	1	...	...	...	...	...	...	...	...	...	1
297	Hypertrophy of Heart	...	...	...	1	1	...	...	...	...	...	...	...	2
298	Dilatation of Heart	1	1	1	1	1	...	1	1	...	1	2	...	10
299	Fatty Heart	1	...	...	...	1	2	...	...	...	...	...	...	4
301	Aneurism (of Heart)	...	...	...	...	1	...	1	...	...	1	...	...	3
	(*a*) Clots in Heart, Thrombus	...	2	...	...	...	1	1	2	1	...	1	1	9
302	Angina Pectoris	4	...	...	1	1	4	1	2	6	3	3	3	28
304	Syncope	1	...	3	4	2	4	1	1	2	4	1	2	25
308	Arterial Sclerosis	1	1	1	1	2	...	1	...	1	...	...	1	9
316	Aneurism of the Arteries	...	1	...	...	...	...	...	...	...	...	...	...	1
322	(2) Embolism do.	2	1	...	...	...	...	...	...	1	...	1	1	6

20—*continued.*

SPECIFIC CAUSES of DEATHS in 1918 arranged according to the Nomenclature of Diseases drawn up by the Committee of the Royal College of Physicians of London—*continued.*

No.	CAUSES OF DEATHS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
	DISEASES OF THE RESPIRATORY SYSTEM.													
338	Asthma	174	128	145	134	105	142	164	100	225	267	166	267	2,017
339	Laryngitis	1	1	1	...	...	1	...	...	...	...	...	1	5
404	Bronchitis	111	119	172	137	100	146	159	92	257	424	97	115	1,929
	„ Acute	33	33	33	31	26	46	50	35	65	46	18	20	436
	„ Chronic	149	116	114	116	103	103	123	94	238	207	104	162	1,629
	„ Capillary	102	68	90	96	85	105	86	59	200	320	62	85	1,358
410	Congestion of the Lungs	1	...	...	1	...	...	...	...	...	...	...	...	2
411	(*a*) Hæmoptysis	...	1	1	2	2	1	1	...	...	1	...	1	10
412	Ædema of the Lungs	2	1	...	1	1	1	2	...	1	1	1	...	11
	Pneumonia	378	379	510	525	355	378	548	257	1,952	3,219	509	641	9,651
413	„ Broncho	293	337	421	444	320	288	450	234	935	1,640	315	380	6,047
	„ Pleuro	...	5	2	3	...	2	...	1	...	...	...	...	13
	„ Lobar	7	12	7	11	7	6	3	7	14	7	3	5	89
	„ Double	12	9	10	8	4	10	15	4	29	52	8	16	177
	„ Croupous	...	...	...	...	...	...	...	...	2	1	...	...	3
416	Gangrene of the Lungs	...	1	...	...	...	1	1	...	...	...	...	...	3
417	Inflammation of the Lungs	...	...	...	...	...	...	...	...	1	...	...	...	1
419	Phthisis	116	114	118	122	121	132	148	134	187	134	113	152	1,591
421	Emphysema	1	3	4	3	4	5	...	2	...	1	...	1	24
422	Atelectasis	6	2	5	...	3	3	...	3	4	...	2	3	31
425	Pleurisy	5	1	3	2	3	2	5	...	...	1	1	...	23
426	Empyema	...	...	...	...	...	1	3	...	2	1	...	...	7
428	Hydrothorax	...	...	...	...	...	...	...	...	1	...	...	...	1
429	Pneumothorax	1	...	...	...	...	...	...	1	...	...	...	1	3
	Cough	1	1	2	2	2	1	...	...	2	...	1	3	15
	Dyspnœa	...	...	...	...	...	...	...	...	...	1	...	...	1
	Failure of Respiration	...	...	...	..	...	...	...	1	...	...	...	...	1
	DISEASES OF THE DIGESTIVE SYSTEM.													
436	Stomatitis	1	...	...	...	...	1	...	..	...	...	...	...	2
438	Cancrum oris	2	1	...	...	...	1	...	...	1	1	...	...	6
440	Disorders of dentition	35	33	32	36	32	45	50	27	56	57	16	22	441
452	Pyorrhœa alveolaris	1	...	...	1	...	...	1	1	...	...	...	...	4
474	Ulceration of the Palate	...	1	...	...	...	...	...	...	...	...	...	...	1
475	Tonsillitis	3	...	1	...	...	1	...	1	...	...	...	...	6
483	Inflammation of the Pharynx	...	...	...	1	...	...	...	...	2	...	1	...	4
	Ulceration of the Throat	...	...	...	...	...	...	...	...	1	...	...	1	2
	Throat abscess	...	...	...	...	...	...	...	...	...	...	...	1	1
489	Gastritis	4	1	2	4	2	1	2	1	2	...	...	2	21
490	Ulceration of the Stomach	...	...	1	2	...	...	...	...	...	...	...	...	3
	Pyloric Obstruction	1	...	...	...	...	...	...	...	...	...	...	...	1
	Chronic Gastric Fever	...	...	...	1	...	...	...	...	...	...	...	1	2
499	Dyspepsia	4	3	3	1	...	3	4	2	8	1	1	5	35
506	Vomiting	...	...	...	...	...	1	...	...	...	...	...	...	1
512	Anorexia	...	...	1	...	...	...	...	...	...	...	...	...	1

20—*continued.*

SPECIFIC CAUSES of DEATHS in 1918 arranged according to the Nomenclature of Diseases drawn up by the Committee of the Royal College of Physicians of London—*continued.*

No.	CAUSES OF DEATHS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
515	Inflammation of the Intestines	...	...	...	...	...	...	...	...	...	...	...	1	1
	(1) Enteritis	33	27	33	30	29	32	39	28	36	26	11	42	366
	„ Gastric	20	...	1	6	2	9	10	7	1	1	3	44	104
	„ Muco	...	...	...	...	...	...	...	...	...	...	...	1	1
	(2) Appendicitis	1	...	1	1	2	2	3	...	1	1	2	...	14
	Typhlitis	...	...	...	...	...	...	...	1	...	...	...	...	1
	(3) Colitis	1	3	1	4	3	2	1	2	2	2	4	2	27
	„ Entero	1	...	...	...	...	...	...	1	...	...	...	...	2
	Ankylostomiasis	2	1	1	2	...	2	3	...	...	1	...	...	12
	Abscess of the Appendix	...	...	...	1	...	...	...	...	...	...	...	...	1
	Intestinal Sepsis	2	...	...	...	...	...	...	...	...	...	...	...	2
518	Hæmorrhage of the Intestines	...	1	1	2	...	...	...	...	...	...	...	...	4
524	Enteroliths	1	...	...	...	...	...	...	...	...	...	...	...	1
525	Fæcal accumulation	...	...	1	...	...	...	...	...	...	...	...	...	1
526	Sprue	16	9	6	12	7	6	9	11	20	18	12	21	147
528	Hernia	1	1	3	2	...	...	...	...	1	1	...	...	9
(5)	„ Inguinal	1	...	...	...	...	...	...	1	...	...	...	...	2
(13)	„ Retro-peritoneal	...	...	...	...	1	1	...	...	...	...	...	...	2
	„ Strangulated	...	...	...	2	1	1	2	...	...	3	1	1	11
530	Intussusception of the Intestines	...	...	1	...	...	...	1	1	...	...	...	1	4
531	Volvulus	...	...	...	...	...	...	...	...	1	...	...	...	1
536	Obstruction of the Intestines	3	2	5	5	4	...	4	1	3	5	5	4	41
537	Perforation „ „	...	2	...	...	...	1	...	...	...	...	...	...	3
	Strangulation „ „	...	...	...	1	1	...	...	...	...	...	...	...	2
540	Diarrhœa	141	102	146	153	152	135	167	127	198	152	84	239	1,796
544	Colic	...	3	3	1	2	...	1	1	...	2	...	2	15
	Intestinal Paralysis	...	...	...	...	...	...	...	...	...	...	1	...	1
547	Ischio-rectal Abscess	...	...	...	...	...	...	...	...	...	...	1	...	1
548	Ulceration of the Rectum	...	...	...	...	...	...	...	...	1	...	...	...	1
550	Fistula in Ano	1	...	...	...	...	...	2	...	...	...	...	...	3
	Fæcal Fistula	...	...	...	...	1	...	1	...	...	...	...	...	2
	Fistula	1	...	...	...	...	...	...	1	...	...	...	...	2
554	Gangrene Rectum	...	1	...	...	...	...	...	...	...	...	...	...	1
556	Piles	2	2	1	1	6	2	3	1	...	3	4	5	30
557	Prolapse Rectum	...	1	...	...	...	...	...	...	...	...	...	...	1
568	Hepatitis	19	25	27	26	19	14	15	11	21	15	12	26	230
	(*b*) Cirrhosis of the Liver	4	7	8	8	6	5	10	2	9	6	7	5	77
	(*b*) (*b*) Biliary Cirrhosis	...	...	...	1	...	...	...	...	...	...	...	...	1
570	Acute Yellow Atrophy of the Liver	...	...	...	...	...	1	...	...	...	...	...	1	2
571	Congestion of the Liver	...	...	...	1	1	...	1	1	2	...	...	...	6
575	Jaundice	2	5	2	1	2	6	...	3	5	3	2	1	32
	Diseases of the Liver	...	...	...	1	...	...	...	...	...	...	...	1	2
	Enlarged Liver	2	4	...	2	2	5	3	1	2	2	1	...	24
	Abscess of the Liver	10	8	4	7	9	6	7	8	4	7	3	2	75
576	Cholecystitis	...	...	1	...	...	...	...	...	...	...	1	...	2
588	Peritonitis	6	2	3	1	3	1	3	3	1	...	6	4	33
590	Dropsy	11	5	8	6	4	5	3	7	11	8	4	13	85
	Abdominal Aneurysm bursting into Peritoneum	...	...	...	...	...	...	...	1	...	...	...	...	1
	Abdominal Abscess	1	...	...	...	...	...	...	...	...	1	...	...	2
	Abscess of the Epiglottis	...	1	...	...	...	...	...	1	...	...	...	...	1
	DISEASES OF THE LYMPHATIC SYSTEM.													
616	Lymphangitis	...	1	...	...	1	...	...	1	...	...	...	1	4
618	Elephantiasis	2	...	...	...	1	1	1	...	1	...	...	...	6

20—*continued.*

SPECIFIC CAUSES of DEATHS in 1918 arranged according to the Nomenclature of Diseases drawn up by the Committee of the Royal College of Physicians of London—*continued.*

No.	CAUSES OF DEATHS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
650	Addison's disease	...	...	...	...	1	...	...	...	...	...	...	...	1
	Enlarged Spleen	1	...	...	...	...	...	...	...	...	...	...	...	1
	Adenitis	1	...	...	...	...	...	...	...	...	...	...	...	1
	DISEASES OF THE URINARY SYSTEM.													
	Nephritis	1	5	10	3	5	4	2	...	3	1	1	1	36
651	„ Acute	1	...	1	1	...	...	...	...	2	...	...	3	8
652	Bright's disease	11	13	13	10	13	10	10	12	12	15	15	15	149
	(1) Chronic Nephritis	2	...	...	1	2	...	2	...	...	2	4	3	16
	(2) „ Interstitial Nephritis	...	...	1	...	...	...	1	...	...	...	...	...	2
653	Disease of Kidney	...	...	2	1	...	1	...	...	1	1	...	...	6
654	(*e*) Perinephric Abscess	...	...	...	...	...	...	1	...	...	...	...	...	1
655	Pyelitis	...	...	...	1	...	...	...	2	1	...	1	...	5
659	Hydronephrosis	1	...	...	...	...	...	...	...	...	...	...	...	1
662	Floating kidney	1	...	...	...	...	...	...	...	...	...	...	...	1
663	(*a*) Calculus in Kidney	...	...	...	...	...	1	1	...	...	...	1	...	3
668	Renal Colic	...	...	...	...	...	...	...	...	...	...	...	1	1
676	Cystitis	2	...	2	...	...	1	1	...	...	2	...	...	6
687	Calculus in the Bladder	...	...	2	1	...	...	1	...	...	...	...	...	4
692	Suppression of urine	...	...	...	...	...	...	...	...	...	...	...	1	1
697	Albuminuria	...	...	...	...	3	1	...	...	1	...	1	...	6
	Uræmia	1	1	3	4	...	2	1	1	1	1	2	1	18
	Cessation of urine	...	...	...	...	1	...	...	...	...	...	...	...	1
	Bleeding from the Bladder	...	...	...	...	...	...	...	...	...	...	...	1	1
	DISEASES OF THE GENERATIVE SYSTEM.													
708	Gleet	1	...	...	...	...	...	...	...	...	...	...	...	1
710	Ulcer of the Urethra	...	...	...	...	...	...	...	...	...	...	1	...	1
712	Stricture of the Urethra	...	...	...	...	...	...	...	...	...	1	...	...	1
715	Extravasation of urine	...	...	1	1	...	...	...	...	1	...	...	...	3
720	Hypertrophy of the Prostate	...	...	...	...	...	...	...	...	...	1	...	3	4
733	Gangrene of the Penis	...	...	...	...	...	...	...	...	...	...	...	1	1
740	Inflammation of the Scrotum	...	...	...	1	...	...	...	...	...	...	...	...	1
741	Abscess of the Scrotum	...	...	...	1	...	...	...	1	...	...	...	...	2
742	Sloughing of the Scrotum	...	...	...	...	1	...	1	...	...	...	...	...	2
754	Hydrocele	...	...	...	...	...	...	...	1	...	...	...	...	1
757	(1) Orchitis	...	...	...	...	...	...	1	...	...	...	...	...	1
773	(*b*) Pyosalpinx	...	...	...	...	1	...	...	...	1	...	...	...	2
783	Inflammation of the Uterine Ligaments.	...	...	...	...	...	...	1	...	...	...	...	...	1
	(*a*) Perimetritis	...	...	...	...	...	...	...	...	...	...	1	...	1
	(*b*) Parametritis	...	...	...	1	...	...	...	1	...	...	...	...	2
785	Inflammation of the Uterus	3	...	...	1	...	...	...	...	...	...	...	...	4
	(*a*) Endometritis	...	...	...	...	...	1	...	...	...	...	...	...	1
797	Rupture of body of Uterus	...	...	...	...	...	...	...	...	...	1	...	...	1
823	Leucorrhœa	1	...	2	2	...	...	...	...	1	...	...	4	10
833	Puerperal hæmorrhage	2	...	2	...	...	...	...	1	1	...	...	...	6
834	Abortion	...	2	1	...	1	2	...	1	3	1	...	...	11
	Hyperemesis gravidarum	...	...	...	...	...	...	...	...	1	...	...	...	1

20—*continued.*

SPECIFIC CAUSES of DEATHS in 1918 arranged according to the Nomenclature of Diseases drawn up by the Committee of the Royal College of Physicians of London—*continued.*

No.	CAUSES OF DEATHS.	January.	Febmary.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
843	Rupture of the Uterus	1	...	...	...	...	...	...	...	...	...	...	...	1
849	Still Birth	172	132	137	148	155	139	169	154	246	241	177	196	2,066
850	Asphyxia of Child	1	1	1	...	3	1	2	2	2	...	...	1	14
852	Premature Birth	35	15	17	19	17	17	36	39	59	50	31	33	368
853	Post-partum Hæmorrhage	3	4	1	4	3	...	...	3	2	2	3	...	25
	Anti- „ „	...	...	...	...	...	1	...	...	1	1	...	...	3
861	Pelvic Abscess	...	1	...	...	...	...	...	...	...	...	...	...	1
866	Puerperal insanity	1	...	...	...	...	...	...	...	...	...	...	...	1
868	Puerperal tetanus	...	...	...	...	...	...	...	1	...	...	...	...	1
870	(*b*) Sudden death after delivery from cardiac embolism.	...	...	...	...	...	...	1	...	...	...	...	...	1
875	(*b*) Chronic abscess of breast	...	...	...	...	2	1	...	...	...	...	...	...	3
	Pregnancy	2	...	...	...	...	...	...	1	1	...	...	1	5
	Labour	6	1	2	2	3	...	...	1	3	6	3	6	33
	Dystocia	...	...	1	...	...	...	...	...	...	...	...	...	1
	Placenta prævia	...	...	...	...	...	...	...	...	...	...	2	...	2
	Debility after Labour	5	...	5	5	3	2	8	7	2	12	1	6	56
	Albuminuria of Pregnancy	2	...	3	1	...	...	...	2	...	2	...	...	10
	Contracted Pelvis	...	...	...	...	...	...	...	1	...	...	...	...	1
	DISEASES OF THE ORGANS OF LOCOMOTION AND CONNECTIVE TISSUE.													
885	(*a*) Osteitis	...	...	1	...	...	...	...	...	...	...	...	...	1
887	Caries of Bones	...	...	...	...	...	1	...	...	1	...	...	1	3
888	Necrosis of Bones	...	...	...	...	...	...	...	...	...	1	...	...	1
903	Arthritis	...	1	...	...	...	...	1	...	1	1	...	1	5
	Synovitis	...	...	...	...	...	1	...	...	...	...	2	2	5
916	Caries of Spine	...	...	...	...	...	...	...	3	...	...	...	...	3
918	Lumbar Abscesses	...	1	...	...	...	...	...	...	...	...	...	...	1
949	Talipes	...	...	...	...	...	...	...	...	...	1	...	...	1
952	Cellulitis	1	2	2	2	...	...	2	1	3	1	2	2	18
953	Abscess	2	2	2	1	3	1	5	2	1	3	2	...	24
954	Gangrene	1	2	1	...	3	1	1	1	3	3	2	1	19
956	Anasarca	2	1	...	1	1	2	...	...	...	1	...	...	8
	Dislocation of the Hip Joint	...	...	...	...	...	...	...	...	...	1	...	...	1
	OTHER LOCAL DISEASES.													
962	Eczema	...	...	...	1	...	...	...	...	...	...	1	...	2
966	Carbuncle	...	...	...	...	...	1	1	...	...	2	...	...	4
968	Bed-sore	...	...	...	...	...	...	...	1	...	...	...	...	1
969	Frostbite	...	...	...	1	...	...	...	...	...	...	...	...	1
972	Pemphigus	...	...	...	...	...	...	...	1	...	...	...	...	1
973	Dermatitis herpetiformis	...	...	...	...	...	...	...	...	...	...	...	1	1
974	Psoriasis	...	...	...	...	...	...	...	...	...	...	...	1	1
	Ulcers	1	1	...	1	...	...	3	1	...	2	...	1	10

20—*concluded.*

SPECIFIC CAUSES of DEATHS in 1918 arranged according to the Nomenclature of Diseases drawn up by the Committee of the Royal College of Physicians of London—*concluded.*

No.	CAUSES OF DEATHS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total
	GENERAL INJURIES.													
1025	(*a*) Burns and Scalds	10	9	9	17	5	12	6	5	2	4	13	8	99
	(*b*) Heat-stroke	...	...	1	...	...	...	...	...	...	...	...	...	1
	(*c*) Sun-stroke	...	...	...	1	2	...	...	...	...	1	...	...	4
1026	Effects of cold	...	...	1	1	...	...	...	...	...	...	...	...	2
1029	„ „ electricity	...	1	...	...	1	...	...	...	...	...	1	...	3
1030	Suffocation	...	...	...	...	...	...	...	...	...	...	1	6	7
	(*b*) „ from strangulation	2	1	1	1	2	1	3	2	...	...	...	3	16
	(*c*) „ from plugging of air passages with foreign bodies.	1	...	...	...	1	...	...	2	...	1	...	...	5
1031	Starvation	1	1	2	1	4	...	2	2	7	2	3	3	28
1033	Shock	5	4	6	5	6	8	6	1	6	2	...	7	56
	Vehicles, Horses, Bullocks, &c.	3	4	4	5	7	5	3	4	7	4	5	5	56
	Ships, Boats, Docks, &c.	...	1	...	1	...	...	...	...	...	...	...	...	2
	Fall from Houses, Trees, Stairs, &c.	3	2	2	2	2	2	...	3	1	3	1	1	22
	Machinery	...	...	...	...	1	...	...	...	...	...	...	...	1
	Fall of Earth, Stones, Bales, &c.	1	...	...	2	...	...	...	1	...	1	...	2	7
	Accidents	3	4	4	2	...	1	1	3	8	5	4	4	39
	LOCAL INJURIES.													
1089	Wound of scalp	...	...	...	1	...	...	...	...	...	...	...	...	1
1091	Fracture of vault of skull	...	1	...	1	...	...	...	2	...	...	3	...	7
1092	„ of base of skull	8	1	2	4	1	4	3	...	1	4	...	6	34
1093	Wound of skull	1	2	2	1	1	1	...	...	...	3	2	1	14
1094	Laceration of membranes of brain	...	...	...	...	2	...	...	...	...	...	...	...	2
1096	Concussion of brain	...	1	2	...	2	...	1	1	2	1	3	1	14
1101	Gun-shot wound of the Head	...	...	2	...	...	...	...	...	...	...	...	...	2
1103	Wound of the Face	...	...	...	...	...	...	...	...	1	...	...	...	1
1135	„ of Neck, including cut-throat	1	2	...	...	1	3	1	...	...	2	1	1	12
1145	Fracture of ribs	1	...	...	...	...	...	...	...	...	...	2	...	3
1149	Penetrating wound of lung	...	...	1	...	...	...	...	...	...	...	...	...	1
1154	Rupture of heart	...	...	...	...	...	...	...	...	...	...	1	...	1
1159	Wound of the Back	...	...	...	...	...	1	...	...	...	...	...	...	1
1162	Compound fracture of Spine	3	...	1	...	1	...	...	...	...	2	...	2	9
1164	Dislocation of Spine	...	...	...	...	...	...	1	1	...	...	...	...	2
	(b) „ „ with fracture.	...	...	...	...	...	...	...	1	...	...	...	...	1
1165	Concussion of Spinal Cord	...	...	...	...	...	...	1	...	...	1	...	...	2
1167	Gun-shot wound of the Back	...	...	...	...	1	1	...	1	...	...	...	...	3
1176	Wound of Male Urethra	...	...	1	...	...	...	...	...	...	...	1	...	2
1197	Wound of the Upper Extremities	...	1	...	...	...	1	...	...	...	...	...	...	2
1205	Fracture of Bones of Forearm	1	...	...	...	...	...	...	...	...	...	...	1	2
1218	Gun-shot wound of Upper Extremities	...	...	...	...	...	...	...	...	...	1	1	...	2
1222	Wound of the Lower Extremities.	1	...	...	...	1	...	...	...	...	1	1	...	4
1227	Fracture of Femur	1	...	2	...	1	...	2	1	...	2	1	1	11
1231	„ Tibia and Fibula	...	...	...	1	...	...	...	...	...	...	...	...	1
1244	Gun-shot wound of the Lower Extremities	...	...	...	...	1	...	...	...	...	...	...	..	1
	Rupture of Spleen	1	...	1	...	...	...	1	...	...	...	...	...	3
	Abdominal wound	1	...	...	...	...	...	...	...	...	...	2	...	3
	Rupture of Liver	...	2	...	1	1	1	...	1	...	...	...	...	6
	DROWNING.													
	Drowning	4	3	9	6	7	9	11	12	8	11	8	3	91
	POISONING.													
	Poisoning	2	12	3	5	4	5	7	6	1	3	4	5	57
	UNSPECIFIED CAUSES.													
	Unspecified Causes	5	15	10	4	6	7	12	7	30	19	9	9	133

TABLE of VACCINE OPERATIONS performed in the City of Bombay in 1918.

Ward.	SECTION.	Population (Census of 1911).	Number of Depôts in each District.	Number of Vaccinators in each District.	Number of persons vaccinated.			Average number of persons vaccinated by each Vaccinator.	Primary Vaccinations.								Re-vaccinations.			Percentage of successful cases where results were known.		Persons successfully vaccinated per 1,000 of population.	Average annual number of persons successfully vaccinated during the past 5 years.		Average annual number of deaths from Small-pox during the preceding 5 years.		Average cost of each successful Vaccination.
									Total.			Successful.																
					Males.	Females.	Total.		Males.	Females.	Total.	Under one year.	One year and under 6 years.	6 years and above.	Total.	Unknown.	Total.	Successful.	Unknown.	Primary vaccinations.	Re-vaccinations.		Number.	Ratio per 1,000 of population.	Number.	Ratio per 1,000 of population.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
																											Rs. a. p
A	Upper Colaba	1,557	1	1	2,223	777	3,000		192	201	393	253	64	...	317	64	2,607	...	2,607	96·35	.....	14·92	356	16·76	1	·64	
	Middle and Lower Colaba	19,679																							6	·30	
	Fort, South...	3,462	1		6,165	1,171	7,336		296	290	586	392	132	6	530	49	6,750	1	6,748	98·69	50·00	17·77	531	18·39	1	·28	
	Fort, North	25,400																							16	·62	
	Esplanade	17,761		1	3,012	688	3,700		78	82	160	101	20	...	121	36	3,540	5	3,534	97.58	83·33	7·09	138	7·76	5	·28	
B	Mandvi	33,202	1		519	250	769		168	174	342	229	74	...	303	31	427	...	427	97·42	.....	9·12	370	11·14	8	·24	
	Chukla	24,231			527	246	773		193	201	394	254	97	...	351	33	379	1	378	97·23	100.00	14·52	369	15·22	2	·08	
	Umarkhadi	45,679	1	1	1,822	804	2,626		454	459	913	639	171	8	818	71	1,713	1	1,712	97·26	100·00	17·92	862	18·87	6	·13	
	Dongri	27,246			1,203	307	1,510		214	236	450	376	39	1	416	24	1,060	...	1,060	97·65	.....	15·26	462	16·99	4	·14	
C	Market	30,172			888	452	1,340		287	272	559	339	139	1	479	66	781	...	781	94·92	.....	15·87	428	14·18	11	·36	
	Dhobi Talao	38,684	1	1	1,755	860	2,615		370	415	785	566	127	4	697	73	1,830	...	1,830	97·89	.....	18·01	737	19·05	28	·72	
	Fanaswadi	27,403			538	342	880		229	231	460	304	93	2	399	43	430	...	430	95·68	.....	14.56	486	17·73	13	·47	
	Bhuleshwar	36,459			581	377	958		312	284	596	387	132	1	520	56	362	...	362	96·29	.....	14·26	483	13·24	3	·08	
	Khara Talao	22,979	1	1	466	292	758		211	234	445	328	61	4	393	45	313	...	313	98·25	.....	17·10	381	17·01	3	·13	
	Kumbharwada	27,703			386	316	702		261	272	533	424	61	1	486	39	169	...	169	98·38	.....	17·54	566	20·43	8	·28	
D	Khetwadi	31,937	1	...	1,079	700	1,779		389	389	778	594	106	2	702	66	1,001	...	1,000	98·59	.....	21·69	654	20·47	16	·50	
	Girgaum	30,779			1,105	733	1,838		458	419	877	631	145	5	781	75	961	1	960	97·38	100·00	25·40	770	25·01	22	·71	
	Chowpati	11,397			917	426	1,343		191	192	383	271	83	2	356	24	960	5	949	99·10	45·45	31·67	320	28·07	4	·35	
	Walkeshwar	10,640	1	...	745	434	1179		143	133	276	195	42	4	241	34	903	...	903	99·58	.....	22·74	211	19·83	2	·18	
	Mahalakshmi	26,302			1,175	688	1,863		325	293	618	498	73	5	576	35	1,245	...	1,242	98·79	.....	21·89	637	24·21	9	·34	
E	Mazagon	30,075	1	...	2,300	766	3,066		340	342	682	500	106	7	613	50	2,384	...	2,384	96·99	.....	20·03	650	21·61	13	·43	
	Tarwadi	28,424			953	534	1,487		272	291	563	469	55	...	524	34	924	...	924	99·05	.....	18·43	521	18·31	17	·49	
	2nd Nagpada	21,700																							12	·55	
	Kamathipura	36,751	1	1	1,165	971	2,136		767	840	1,607	1,211	257	12	1,480	115	529	2	527	99·19	100 00	17·39	1,453	16·85	53	·89	
	Tardeo	27,758																							17	·61	
	Byculla	75,348	1		3,386	2,225	5,611		571	596	1,167	863	132	3	998	154	4,444	1	4,441	98·51	33·33	12·21	1,170	14·30	48	·63	
	1st Nagpada	6,414																							3	·46	
F	Parel	45,474	1		951	637	1,588		356	369	725	558	107	3	668	49	863	1	862	98·81	100·00	14·71	793	17·43	25	·54	
	Sewri	19,067			804	206	1,010		193	166	359	290	39	1	330	23	651	...	651	98·21	.....	17·25	354	18·56	8	·41	
	Sion	30,680	1	1	5,171	622	5,793		335	375	710	518	119	7	644	62	5,083	...	5,083	99·38	.....	29·00	708	23·07	14	·45	
G	Mahim	30,492	1		978	904	1,882		573	602	1,175	862	179	11	1,052	103	707	...	707	98·13	.....	34·20	1,257	41·22	13	·42	
	Worli	89,611			1,002	746	1,748		607	586	1,193	938	159	7	1,104	75	555	...	555	98·74	.....	12·30	1,297	14·47	46	·51	
	Harbour, Docks, Railways and Homeless	44,979	...		3,688	293	3,981		206	165	371	75	42	3	120	251	3,610	24	3,543	100.00	35·82	32·01	316	7·02	6	·13	
	Total ...	9,79,445	14	6	45,504	17,767	63,271	10,535	8,991	9,109	18,100	13,065	2,854	100	16,019	1,780	45,171	42	45,072	98·14	42·42	16·39	17,291	7·25	423	·43	2 4 6

22

TABLE of Births registered and of Vaccinations of Infants under one year of age performed in the year 1918

Ward.	SECTIONS.	Total number of births exclusive of still-born.	Still-born.	Deaths under one year.	Number of Infants surviving.	Number of Infants vaccinated under one year.	Percentage of vaccinations to births registered.
A	Upper Colaba	87	4	29	58	311	68·65
	Middle and Lower Colaba	366	36	165	201		
	Fort, South	37	...	5	32	430	66.15
	Fort, North	613	46	302	311		
	Esplanade	307	29	105	202	120	39.08
B	Mandvi	441	67	454	...	256	58·04
	Chukla	396	37	281	115	285	71·96
	Umarkhadi	1,396	102	835	561	708	50·71
	Dongri	485	40	342	143	404	83·29
C	Market	349	45	291	58	400	114·61
	Dhobi Talao	879	82	427	452	614	69·85
	Fanaswadi	515	69	321	194	350	67·96
	Bhuleshwar	651	65	464	187	438	67·28
	Khara Talao	563	60	287	276	370	65·71
	Kumbharwada	665	66	389	276	464	69·77
D	Khetwadi	804	88	347	457	653	81·21
	Girgaum	737	82	401	336	700	94·97
	Chowpati	296	32	99	197	289	97·63
	Walkeshwar	284	21	99	185	217	76·40
	Mahalakshmi	683	60	305	378	529	77·46
E	Mazagon	804	68	539	265	548	68·15
	Tarwadi	869	94	493	376	499	57·42
	2nd Nagpada	515	63	369	146	1,311	61·75
	Kamathipura	817	102	577	240		
	Tardeo	791	52	374	417		
	Byculla	1,903	191	1,430	473	989	48·17
	1st Nagpada	150	11	48	102		
F	Parel	919	93	596	323	601	65·39
	Sewri	455	45	306	149	314	69·01
	Sion	816	71	394	422	566	69·36
G	Mahim	1,024	61	461	563	959	93·65
	Worli	2,116	184	1,293	823	1,000	47·25
	Harbour, Docks, Railways and Homeless	...	...	.....	.....	246	.....
	Total	21,733	2,066	12,828	8,905	14,571	67·04

23

TABLE of Primary Vaccinations performed with different kinds of Lymph in 1918.

	Number of operations.	Successful.	Unknown.	Percentage of success after deducting the unknown cases.
I Calf Lymph ...	5,751	5,087	631	99·35
II Glycerinated Lymph ...	12,349	10,932	1,149	97·60
III Lanolinated Lymph ...	.....	.....	.....	.....
IV Human Lymph ...	.....	.....	.....	.....
Total ...	18,100	16,019	1,780	98·15

24

TABLE of prosecutions instituted by the Vaccination Department in 1918.

1	2	3	4	5	6	7
Section of the Act.	Nature of the Charge.	Number of Cases instituted.	Number of Cases discharged.	Otherwise.	Number of Cases convicted.	Amount of Fines inflicted.
Section VII of the Bombay Vaccination Act I of 1877.	.....	...	...	...	...	...

25

TABLE of DEATHS by Disease

Wards.	SECTIONS.	GENERAL DISEASES.																		
					FEVERS.															
		Small-pox.	Measles.	Plague.	Scarlet Fever.	Enteric Fever.	Malarial Fever.	Ague and Remittent Fever.	Relapsing Fever.	Influenza.	Whooping Cough.	Diphtheria.	Cholera.	Diarrhœa.	Dysentery.	Puerperal Septicæmia.	Leprosy.	Cancer.	Premature Birth.
A	Upper Colaba	8	...	3	...	5	...	2	...	28	...	...	5	4	5	1	...	2	2
	Middle and Lower Colaba...	26	13	81	...	8	4	14	...	115	...	...	92	7	9	...	...	2	21
	Fort, Southern	6	1	6	...	6	4	4	...	23	...	...	7	8	6	...	...	...	3
	Fort, Northern	56	17	90	...	10	15	90	...	163	...	...	86	29	15	4	...	7	23
	Esplanade	15	3	19	...	16	13	37	2	148	...	2	22	19	23	2	...	5	12
B	Mandvi	44	12	73	...	5	7	142	...	25	2	...	15	34	9	26	1	5	4
	Chukla	17	20	38	...	...	4	37	...	10	...	...	5	16	7	21	...	3	6
	Umarkhadi	40	19	44	...	1	4	319	...	213	...	...	12	75	92	26	1	3	12
	Dongri	8	3	14	...	...	5	180	...	85	...	...	13	32	60	5	...	...	9
C	Market	29	28	60	...	8	7	42	...	37	...	...	30	26	17	17	...	1	8
	Dhobi Talao	46	38	44	...	4	13	139	...	91	...	...	105	48	27	...	...	4	29
	Fanaswadi	17	50	29	...	5	7	129	...	50	...	...	111	28	23	1	...	3	13
	Bhuleshwar	4	29	52	...	1	4	184	...	37	1	...	11	86	9	4	...	5	10
	Khara Talao	11	12	33	...	1	...	54	...	76	...	...	5	30	13	14	...	...	11
	Kumbharwada	27	27	46	...	...	4	192	...	197	...	...	38	47	13	10	1	...	12
D	Khetwadi	41	16	22	...	4	6	159	...	106	...	...	77	28	15	10	1	9	28
	Girgaum	57	18	29	...	5	...	141	...	140	1	1	111	22	25	6	...	5	22
	Chowpati	19	5	13	...	6	3	35	...	35	...	...	22	9	5	2	...	2	11
	Walkeshwar	9	2	7	...	...	1	24	...	30	...	...	70	9	6	...	...	3	4
	Mahalakshmi	29	16	30	...	3	2	43	...	60	...	...	48	74	29	3	1	3	10
E	Mazagon	40	2	32	...	3	4	168	...	237	...	...	37	187	30	16	...	2	6
	Tarwadi	42	1	34	...	4	18	152	...	221	...	1	40	160	52	11	1	3	18
	2nd Nagpada...	32	17	6	...	2	1	66	...	21	...	...	6	31	21	3	...	2	4
	Kamathipura	41	17	39	...	2	...	176	2	282	...	...	15	69	30	12	...	...	5
	Tardeo	27	38	32	...	...	4	68	...	55	1	1	17	45	5	2	1	4	16
	Byculla	161	24	67	...	6	7	137	1	658	3	...	134	87	133	34	1	5	43
	1st Nagpada	6	1	1	...	...	3	15	...	15	...	...	3	6	8	...	...	...	2
F	Parel	35	4	37	...	4	7	258	...	120	1	...	167	49	40	15	...	1	5
	Sewri	13	3	9	...	...	1	125	...	26	...	...	53	49	22	11	...	...	1
	Sion	25	8	34	...	7	23	216	3	175	2	...	96	128	62	13	113	...	2
G	Mahim	19	16	30	...	1	6	166	...	155	...	...	13	118	47	11	2	...	6
	Worli	64	37	88	...	3	8	693	...	306	...	1	184	231	140	44	1	5	10
	Harbour, Docks, Railways and Homeless	10	1	1	...	5	15	12	1	24	...	...	12	5	3	...	...	...	...
	TOTAL ...	1,024	486	1,143	...	125	200	4,219	9	3,964	11	6	1,662	1,796	1,001	324	124	84	368

and Section in 1918.

					LOCAL DISEASES.												INJURIES.					
								Respiratory System.									General.					
Debility.	Old Age.	Tubercle of Lungs.	All other Tubercular Diseases.	Other General Diseases.	Nervous System.	Diseases of the Eye, Ear and Nose.	Circulatory System.	Phthisis.	Other Diseases of the Respiratory System.	Digestive System.	Lymphatic System.	Urinary System.	Generative System.	Still-born.	Organs of Locomotion and Connective Tissue.	Other Local Diseases.	Drowning.	Other General Injuries.	Local Injuries.	Poison.	Unspecified Causes.	TOTAL.
5	2	3	5	12	9	...	4	13	44	16	...	2	2	4	...	...	...	1	2	...	...	185
39	13	6	4	49	34	...	10	26	197	37	...	10	6	36	1	...	1	6	5	...	...	836
8	...	74	12	27	7	1	8	5	72	10	...	2	...	...	6	...	...	...	5	1	...	312
77	26	21	14	59	33	...	25	73	509	70	1	26	2	46	5	...	2	14	3	2	...	1,567
40	7	46	28	59	15	...	20	34	354	39	...	14	5	29	6	...	4	10	5	2	4	1,030
76	47	7	8	68	36	...	9	68	1,100	47	...	12	8	67	2	...	...	8	4	5	3	1,912
72	94	13	6	87	32	1	9	19	600	41	...	2	5	37	2	1	...	5	3	...	2	1,238
215	212	18	7	184	259	2	20	72	1,203	129	...	14	7	102	1	...	3	16	11	2	15	3,251
75	63	4	4	50	104	...	5	15	496	67	...	5	3	40	3	...	1	6	1	...	2	1,318
54	50	15	6	59	28	1	16	12	751	33	...	2	2	45	2	...	3	15	2	2	1	1,364
111	119	15	17	92	64	1	44	30	870	93	1	9	22	82	4	...	2	14	4	3	7	2,110
76	83	8	4	87	48	...	13	22	704	62	...	7	18	69	...	...	2	8	2	6	2	1,612
114	175	7	6	136	74	...	10	15	739	122	...	4	23	65	3	2	3	14	2	1	7	1,894
82	78	13	5	85	124	...	7	53	488	84	...	9	4	60	2	1	...	8	1	...	5	1,309
121	79	7	5	84	54	...	8	60	587	94	...	11	7	66	2	...	...	10	6	3	3	1,755
81	73	14	14	90	50	...	23	67	609	60	2	14	11	88	2	2	...	11	6	1	3	1,655
87	83	17	18	67	67	...	9	82	669	60	1	6	6	82	3	1	...	10	1	5	8	1,783
30	29	2	5	21	18	...	7	16	171	18	1	7	2	32	...	...	2	1	...	1	2	500
27	20	4	1	11	27	...	7	12	208	18	...	3	2	21	1	1	4	7	2	...	5	525
67	13	12	8	97	59	...	9	69	691	38	1	7	4	60	...	...	5	10	—	...	...	1,441
153	95	9	2	47	186	...	11	2	853	18	...	9	11	68	2	...	3	14	4	1	2	2,186
137	81	73	27	74	178	2	25	29	1,002	80	1	12	15	94	14	2	7	35	18	4	10	2,584
86	107	5	3	130	44	...	6	117	732	55	...	11	7	63	3	2	2	7	6	1	2	1,538
124	12	20	5	180	115	...	8	232	1,106	75	...	11	6	102	1	...	...	11	5	3	3	2,607
83	7	10	6	134	69	...	9	131	767	35	1	9	3	52	2	1	...	7	4	...	3	1,597
437	468	23	12	214	560	...	21	39	1,871	286	...	13	8	191	7	5	2	39	13	7	11	5,525
10	19	2	...	21	8	1	4	13	140	5	...	4	...	11	...	...	...	2	2	...	...	290.
156	323	7	7	51	33	...	7	13	1,353	23	...	...	6	93	1	...	5	9	7	1	3	2,748
90	153	3	1	21	17	...	1	6	588	7	...	1	1	45	2	1	6	6	3	...	1	1,220
122	168	176	14	37	28	1	24	33	911	44	2	10	3	71	5	1	6	12	8	1	13	2,521
127	125	8	6	57	113	...	15	55	831	50	1	8	3	61	4	...	12	10	3	...	3	2,014
429	415	8	5	314	256	1	14	155	2,120	100	1	14	14	184	4	1	15	26	4	5	9	5,725
...	2	5	2	9	1	...	5	4	91	4	...	1	...	...	...	...	1	6	6	...	6	230
3,411	3,241	655	267	2,713	2,749	11	413	1,591	23,487	1,920	13	268	216	2,066	90	21	91	348	147	57	133	58,388

TABLE of DEATHS by Race, Cause and Sex in 1918.

RACE OR CASTE.	GENERAL DISEASES.																			
	Small-pox.		Measles.		Plague.		Fevers.										Influenza.		Whooping Cough.	
							Scarlet Fever.		Enteric Fever.		Malarial Fever.		Ague and Remittent Fever.		Relapsing Fever.					
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Jains	17	11	25	23	108	41	...	...	4	2	7	5	84	70	...	...	73	61	1	...
Brahmins	37	17	19	14	62	25	...	...	2	3	9	6	116	76	...	...	85	65	...	...
Lingaits	2	2	...	2	2	...	...	...	...	...	...	...	22	16	...	...	14	10	...	...
Bhatias	3	6	1	1	7	3	...	...	3	...	1	...	16	10	...	...	3	3	1	...
Hindus of other Castes... ...	327	171	104	117	445	155	...	...	39	5	66	14	1,332	1,063	3	1	1,125	867	2	2
Hindus, Low Caste	80	58	40	59	52	13	...	...	2	...	2	4	272	260	...	...	326	328	...	...
Mussulmans	66	30	32	19	113	27	...	...	4	2	31	8	378	343	5	...	356	205	1	...
Parsees	12	12	8	3	14	17	...	...	10	9	7	9	27	19	...	...	69	94	1	1
Jews	3	1	...	1	1	1	...	...	1	...	1	1	10	7	...	...	8	8	...	...
Indian Christians	81	59	9	4	29	21	...	...	8	3	7	10	47	45	...	...	115	92	1	1
Eurasians	4	...	1	1	1	2	...	...	2	1	2	2	2	1	...	...	8	8	...	...
Europeans	18	6	...	3	1	3	...	...	15	7	4	1	1	...	...	...	20	9	...	...
Negro-Africans	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Buddhists	1	...	...	...	...	...	...	...	2	1	3	...	...	...	...	...	10	...	...	...
Other and Unknown Castes ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	...	...
All Castes ... Males	651	...	239	...	835	...	...	...	92	...	140	...	2,308	...	8	...	2,214	...	7	...
All Castes ... Females	...	373	...	247	...	308	...	...	...	33	...	60	...	1,911	...	1	...	1,750	...	4
All Castes ... Persons	1,024		486		1,143		...		125		200		4,219		9		3,964		11	

26—*continued.*

TABLE of DEATHS by Race, Cause and Sex in 1918—*continued.*

RACE OR CASTE.	GENERAL DISEASES—*contd.*																			
	Diphtheria.		Cholera.		Diarrhœa.		Dysentery.		Puerperal Septicæmia.		Leprosy.		Cancer.		Premature Birth.		Debility.		Old Age.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females	Males.	Females.
Jains	...	...	6	...	13	27	11	7	...	23	...	...	5	1	14	3	70	50	38	50
Brahmins	...	...	19	7	31	26	20	12	...	5	1	...	6	2	8	5	62	41	46	44
Lingaits	...	...	3	1	4	8	2	7	...	2	...	...	..	...	...	2	6	11	9	8
Bhatias	...	...	...	1	11	6	3	1	...	5	...	...	...	...	2	...	11	4	16	10
Hindus of other Castes	1	...	874	391	485	408	344	189	...	145	77	17	9	8	78	60	968	755	761	887
Hindus, Low Caste	1	...	106	83	147	130	78	72	...	39	6	...	...	1	27	18	301	246	161	220
Mussulmans	...	1	43	15	174	158	105	59	...	98	7	1	2	6	22	25	381	312	406	411
Parsees	...	1	8	4	31	26	15	8	...	2	...	...	11	16	18	16	17	9	34	63
Jews	...	...	...	1	3	5	4	1	...	2	...	...	...	...	1	3	6	7	7	15
Indian Christians	...	...	52	32	46	38	20	21	...	3	6	8	3	5	29	23	75	67	18	25
Eurasians	...	1	...	...	4	2	3	1	...	...	...	1	...	4	2	...	3	3	1	3
Europeans	...	1	10	6	5	6	12	3	...	...	...	...	2	2	5	3	2	1	1	3
Negro-Africans	...	...	...	...	...	...	2	1	...	...	...	...	..	1	...	...	1	1	3	...
Buddhists	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Other and Unknown Castes ...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	3	...	...	...	1
All Castes... Males	2	...	1,121	...	956	...	619	...	...	...	97	...	38	...	207	...	1,904	...	1,501	...
All Castes... Females	...	4	...	541	...	840	...	382	...	324	...	27	...	46	...	161	...	1,507	...	1,740
All Castes... Persons	6		1,662		1,796		1,001		324		124		84		368		3,411		3,241	

TABLE of DEATHS by Race, Cause and Sex in 1918—*continued.*

RACE OR CASTE.	GENERAL DISEASES—*concluded.*						LOCAL DISEASES.															
	Tubercle of Lung.		Other Tubercular Diseases.		Other General Diseases.		Nervous System		Diseases of the Eye, Ear and Nose.		Circulatory System.		Respiratory System.				Digestive System.		Lymphatic System.		Urinary System.	
													Phthisis.		Other Diseases of the Respiratory System.							
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Jains	5	3	4	4	43	53	53	36	1	...	18	7	13	24	665	510	38	33	1	...	6	3
Brahmins...	3	8	8	11	45	55	42	40	...	...	6	3	25	40	554	479	47	26	...	...	5	4
Lingaits	1	...	...	...	10	18	13	4	...	...	2	...	4	8	80	93	2	5	...	...	...	...
Bhatias	...	1	...	2	6	9	8	8	...	...	2	1	3	8	68	63	7	5	...	...	...	2
Hindus of other Castes	301	41	66	51	548	577	586	462	3	...	98	25	341	392	6,668	5,183	533	310	...	1	58	39
Hindus, Low Caste	9	3	6	2	183	187	291	263	...	...	12	4	97	98	1,841	1,788	150	125	...	...	5	7
Mussulmans	151	23	38	21	292	437	374	336	2	2	58	19	206	275	2,474	1,726	270	152	...	...	28	23
Parsees	5	4	11	15	56	46	46	37	...	...	34	28	6	8	164	202	34	38	5	5	16	15
Jews	...	2	...	1	8	8	11	9	1	1	2	1	3	3	38	57	3	6	...	...	2	2
Indian Christians	43	19	6	13	40	39	53	41	...	1	40	23	16	11	408	291	48	45	...	...	25	7
Eurasians	11	1	...	...	5	6	8	3	...	...	2	3	3	1	35	14	6	3	...	...	4	5
Europeans	8	2	4	1	20	10	13	5	...	...	16	4	2	...	36	15	23	6	...	...	4	4
Negro-Africans	...	...	...	...	2	...	...	...	...	...	...	...	...	2	6	2	...	...	...	...	...	1
Buddhists...	11	...	3	...	9	...	3	...	...	...	4	...	1	...	15	1	4	1	1	...	2	...
Other and Unknown Castes ...	...	...	...	...	1	...	2	2	...	...	1	...	...	1	8	3	...	...	...	...	1	...
All Castes ... Males	548	...	146	...	1,268	...	1,503	...	7	...	295	...	720	...	13,060	...	1,165	...	7	...	156	...
All Castes ... Females ...	...	107	...	121	...	1,445	...	1,246	...	4	...	118	...	871	...	10,427	...	755	...	6	...	112
All Castes ... Persons... ...	655		267		2,713		2,749		11		413		1,591		23,487		1,920		13		268	

ABLE of DEATHS by Race, Cause and Sex in 1918—*concluded.*

RACE OR CASTE.	LOCAL DISEASES—*concld.*								INJURIES.						Poisons.		Unspecified Causes.		All Causes.		
	Generative System.		*Still-born.*		Organs of Locomotion and Connective Tissue.		Other Local Diseases.		GENERAL. Drowning.		GENERAL. Other General Injuries.		Local Injuries.								
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
Jains	2	14	*29*	*27*	5	2	...	...	2	1	5	12	4	3	2	2	2	5	1,349	1,086	2,435
Brahmins	...	17	*62*	*28*	2	1	...	...	...	2	8	3	3	...	6	...	6	1	1,283	1,038	2,321
Lingaits	...	...	*5*	*9*	...	...	...	...	...	...	1	...	...	...	...	1	...	...	177	198	375
Bhatias	1	1	*19*	*8*	...	...	...	...	...	...	...	3	...	...	...	...	...	...	173	153	326
Hindus of other Castes ...	11	79	*577*	*374*	31	16	5	2	43	16	124	70	53	20	21	6	46	21	16,576	12,566	29,142
Hindus, Low Caste ...	2	21	*184*	*130*	2	1	1	...	8	1	21	11	6	2	1	1	2	1	4,238	4,046	8,284
Mussulmans	5	36	*228*	*155*	11	9	3	6	8	1	37	14	28	2	5	2	22	7	6,138	4,811	10,949
Parsees	4	4	*35*	*29*	4	...	1	1	2	1	3	6	2	3	3	1	...	...	678	723	1,401
Jews	...	2	*10*	*4*	...	...	...	1	...	...	1	2	...	1	...	...	...	2	114	151	265
Indian Christians ...	2	8	*49*	*52*	3	2	1	...	2	1	8	3	6	...	2	...	3	2	1,252	963	2,215
Eurasians	...	...	*2*	*2*	...	...	...	...	...	...	1	1	...	...	...	1	...	...	108	68	176
Europeans	2	5	7	*6*	1	...	...	...	1	...	1	1	9	...	2	1	...	...	238	108	346
Negro-Africans	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	16	8	24
Buddhists	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...	74	3	77
Other & Unknown Castes.	...	...	*19*	*16*	...	...	...	...	2	...	5	7	1	2	...	...	5	2	30	22	52
All Castes... Males ...	29	...	*1,226*	...	59	...	11	...	68	...	215	...	114	...	42	...	92	...	32,444	...	
All Castes... Females ...	...	187	...	*840*	...	31	...	10	...	23	...	133	...	33	...	15	...	41	...	25,944	
All Castes... Persons ...	216		2,066		90		21		91		348		147		57		133		58,388		

TABLE of DEATHS by Age, Sex and Cause in 1918.

AGE.		GENERAL DISEASES.																			
		Small-pox.		Measles.		Plague.		Fevers, Scarlet Fever.		Enteric Fever.		Malarial Fever.		Ague and Remittent Fever.		Relapsing Fever.		Influenza.		Whooping Cough.	
		Males.	Females.	Males.	Females.	Males	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
DAYS	1 to 30	3	2	2	1	...	...	...	...	...	...	...	...	22	13	...	...	3	1	...	...
MONTHS	1 to 6	50	46	49	43	...	1	...	...	...	...	1	1	95	87	...	...	9	8	1	...
	7 to 12	52	49	70	52	1	...	...	...	...	...	2	...	87	92	...	...	23	33	3	2
YEARS	1 to 2	38	42	49	69	2	1	...	...	...	...	2	2	63	81	...	...	32	25	1	2
	2 to 3	27	26	22	23	2	1	...	...	...	...	1	...	43	43	...	...	29	22	...	...
	3 to 4	28	20	10	19	4	3	...	...	...	...	1	1	48	30	...	...	18	33	2	...
	4 to 5	14	13	9	8	8	7	...	...	1	...	1	4	37	31	...	...	24	22	...	...
	5 to 10	38	24	15	24	41	32	...	...	2	4	5	3	99	157	...	...	107	108	...	...
	10 to 15	38	26	7	4	99	47	...	...	9	...	5	...	131	141	...	...	80	147	...	...
	15 to 20	108	39	3	2	159	51	...	...	15	6	15	5	255	233	3	...	273	201	.	...
	20 to 25	115	38	2	...	201	47	...	...	15	5	16	8	378	308	...	...	336	464	.	...
	25 to 30	75	26	1	1	115	39	...	...	23	4	29	8	329	240	3	1	494	263	...	...
	30 to 35	31	7	...	...	91	23	...	...	8	4	18	3	251	176	1	...	248	150	...	...
	35 to 40	18	6	...	1	45	18	...	...	4	4	15	7	186	107	...	...	237	130	...	...
	40 to 45	5	2	...	...	28	15	...	...	5	2	5	2	84	48	...	...	94	46	...	...
	45 to 50	6	4	...	...	14	12	...	...	6	2	7	2	93	38	...	...	96	39	...	...
	50 to 55	1	1	...	...	10	4	...	...	1	1	5	3	38	21	...	...	50	20	...	...
	55 to 60	3	2	...	...	10	7	...	...	1	1	7	5	46	25	1	...	35	25	...	...
	60 & over	1	...	...	...	5	1	...	...	2	...	4	6	41	40	...	...	19	13	...	...
	Unspecified Age	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	7	...	...	...
ALL AGES.	Males	651	...	239	...	835	...	...	...	92	...	140	...	2,308	...	8	...	2,214	...	7	...
	Females	...	373	...	247	...	308	...	...	...	33	...	60	...	1,911	...	1	...	1,750	...	4
	Persons	1,024		486		1,143		...		125		200		4,219		9		3,964		11	

27—*continued.*

TABLE of DEATHS by Age, Sex and Cause in 1918—*continued.*

AGE.		GENERAL DISEASES—*contd.*																			
		Diphtheria.		Cholera.		Diarrhœa.		Dysentery.		Puerperal Septicæmia.		Leprosy.		Cancer.		Premature Birth.		Debility.		Old Age.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females	Males.	Females.	Males.	Females.
DAYS	1 to 30	...	...	...	...	13	7	1	..	...	...	...	..	...	...	206	160	1,517	1,089	...	...
MONTHS	1 to 6	...	...	...	...	55	53	6	4	...	...	...	...	...	...	1	1	261	226	...	...
	7 to 12	...	...	2	...	139	123	21	16	...	...	...	...	...	...	...	...	29	47	...	...
YEARS	1 to 2	2	...	6	4	96	127	26	27	...	...	...	...	...	...	...	...	18	100	...	..
	2 to 3	...	...	13	7	45	50	24	29	...	...	...	...	...	...	...	...	7	4	...	...
	3 to 4	...	1	9	7	25	30	30	33	...	...	.	...	...	1	...	...	...	2	...	...
	4 to 5	...	...	5	13	17	14	15	14	...	...	...	...	...	...	...	...	...	1	...	...
	5 to 10	...	...	50	25	42	33	37	39	...	...	...	...	...	...	...	...	2	2	...	...
	10 to 15	...	2	27	26	27	25	13	19	...	3	...	...	...	...	...	...	...	1	...	...
	15 to 20	...	...	109	75	41	43	42	24	...	86	5	2	...	2	...	...	1	2	...	...
	20 to 25	...	...	200	98	87	67	86	39	...	105	8	1	1	1	...	...	4	3	...	...
	25 to 30	...	1	206	99	83	59	81	31	...	78	12	2	1	2	...	...	19	6	...	...
	30 to 35	...	...	137	61	48	39	31	32	...	35	18	3	3	2	...	...	15	5	...	...
	35 to 40	...	...	128	46	49	45	58	23	...	16	15	5	1	8	...	...	6	5	...	...
	40 to 45	...	...	73	24	35	22	37	14	...	1	12	4	6	8	...	...	5	2	...	...
	45 to 50	...	...	76	29	63	33	30	12	...	...	12	4	4	5	..	...	6	8	2	2
	50 to 55	...	...	24	6	19	8	14	6	...	...	8	2	3	6	...	...	3	2	7	12
	55 to 60	...	...	34	14	39	31	18	17	...	...	3	1	7	4	...	...	...	1	393	389
	60 and over	...	...	22	7	33	31	19	3	...	...	4	3	12	7	...	...	...	1	1,099	1,337
	Unspecified Age	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
ALL AGES.	Males	2	...	1,121	...	956	...	619	...	...	...	97	...	38	...	207	...	1,904	...	1,501	...
	Females	...	4	...	5,41	...	840	...	382	...	324	...	27	...	46	...	161	...	1,507	...	1,740
	Persons	6		1,662		1,796		1,001		324		124		84		368		3,411		3,241	

TABLE of DEATHS by Age, Sex and Cause in 1918—*continued.*

AGE.		GENERAL DISEASES—*concld.*						LOCAL DISEASES.													
		Tubercle of Lung.		Other Tubercular Diseases.		Other General Diseases.		Nervous System.		Diseases of the Eye, Ear and Nose.		Circulatory System.		Respiratory System. Phthisis.		Respiratory System. Other Diseases of the Respiratory System.		Digestive System.		Lymphatic System.		Urinary System.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
DAYS	1 to 30	...	...	...	...	20	7	89	79	...	1	2	3	...	...	55	49	12	105	...	...	...	...
MONTHS	1 to 6	...	...	...	...	20	1	630	592	...	...	...	...	...	...	960	932	25	8	1	...	...	2
	7 to 12	...	1	1	2	198	220	343	300	...	...	...	2	...	...	1,442	1,405	198	185	...	1	3	...
YEARS	1 to 2	...	...	2	4	305	329	116	91	...	1	1	1	...	...	978	981	196	71	1	...	2	2
	2 to 3	...	1	5	2	117	153	22	21	1	1	1	...	2	...	428	479	31	22	...	...	1	...
	3 to 4	...	...	...	...	50	51	19	7	1	...	...	1	...	1	249	305	11	15	...	...	...	1
	4 to 5	...	1	...	1	1	28	22	8	9	...	...	...	1	1	2	199	231	6	3	...	...	2	1
	5 to 10	...	...	2	4	7	49	72	15	9	...	...	...	2	10	15	493	611	28	23	...	...	2	...
	10 to 15	...	7	4	4	12	22	54	6	9	...	...	...	3	15	76	349	412	17	19	...	...	3	1
	15 to 20	...	73	13	16	17	49	118	12	18	3	...	10	11	98	171	894	870	35	37	...	...	5	8
	20 to 25	...	134	28	35	28	80	138	19	8	...	1	23	14	159	211	1,505	803	96	70	...	1	8	9
	25 to 30	...	145	31	23	22	85	110	28	12	1	...	43	15	162	192	1,219	785	130	51	...	...	20	14
	30 to 35	...	70	9	19	8	57	58	28	7	...	...	43	9	119	99	878	446	93	34	1	...	17	15
	35 to 40	...	46	12	10	1	48	44	22	9	1	...	31	11	83	65	817	447	93	27	...	2	17	15
	40 to 45	...	27	3	13	4	34	19	26	9	...	...	29	8	35	27	518	264	59	20	...	...	16	6
	45 to 50	...	24	2	6	5	42	17	26	10	...	...	26	11	21	9	796	466	56	24	1	...	25	8
	50 to 55	...	5	2	...	3	21	9	23	9	...	...	26	4	5	2	384	208	26	13	...	...	7	5
	55 to 60	...	9	...	5	5	15	7	24	8	...	...	20	9	9	1	502	366	28	6	...	...	15	10
	60 & over	...	5	...	2	...	27	16	45	39	...	...	37	13	1	...	399	377	25	22	3	2	13	14
	Unspecified Age	..	1	...	...	...	1	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
ALL AGES.	Males	...	548	...	146	...	1,268	...	1,503	...	7	...	295	...	720	...	13,060	...	1,165	...	7	...	156	...
	Females	...	...	107	...	121	..	1,445	...	1,246	...	4	...	118	...	871	...	10,427	...	755	...	6	...	112
	Persons	...	655		267		2,713		2,749		11		413		1,591		23,487		1,920		13		268	

TABLE of DEATHS by Age, Sex and Cause in 1918—*concluded.*

AGE.	LOCAL DISEASES—*concld.*								INJURIES.												All Ages.
	Generative System.		Still-born		Organs of Locomotion and Connective Tissue.		Other Local Diseases.		General. Drowning.		General. Other General Injuries.		Local Injuries.		Poisons.		Unspecified Causes.		All Causes.		
	Males.	Females.	Males.	Females	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males	Females	Males.	Females.	Males	Females.	Males.	Females.	Persons.
DAYS ... 1 to 30...	7	2	...	...	...	...	1	...	...	...	5	7	...	2	...	...	1	...	1,959	1,528	3,487
MONTHS 1 to 6...	2	...	...	...	...	1	...	...	1	...	...	1	1	...	2	...	2	1	2,172	2,008	4,180
MONTHS 7 to 12...	...	1	...	...	2	3	...	...	1	...	2	4	...	...	...	1	2	1	2,621	2,541	5,162
1 to 2...	...	...	...	...	1	...	...	...	...	2	3	6	1	...	...	...	...	1	1,936	1,969	3,905
2 to 3...	...	...	...	...	...	...	...	...	1	...	3	3	1	2	1	...	...	2	828	891	1,719
3 to 4...	...	...	...	...	...	...	...	...	1	...	4	5	3	3	...	...	...	...	513	569	1,082
4 to 5...	1	...	...	...	...	...	...	...	...	...	4	1	...	1	...	...	...	2	382	391	773
5 to 10...	1	...	...	...	1	1	...	1	10	2	12	11	7	4	1	...	...	5	1,071	1,216	2,287
10 to 15...	...	3	...	...	4	...	...	2	2	4	14	11	2	...	...	1	5	2	889	1,054	1,943
15 to 20...	1	35	...	...	5	2	...	...	5	4	13	22	7	3	2	5	7	7	2,274	2,111	4,385
YEARS... 20 to 25...	1	62	...	...	4	3	2	1	17	3	34	9	15	5	7	1	9	5	3,597	2,584	6,181
25 to 30...	1	41	...	...	12	4	3	...	11	5	30	14	23	5	7	2	18	2	3,482	2,165	5,597
30 to 35...	4	22	...	...	9	4	1	1	4	1	23	7	14	1	9	1	18	4	2,317	1,265	3,582
35 to 40...	2	18	...	...	5	3	1	2	6	...	29	6	16	...	7	1	11	2	2,007	1,081	3,088
40 to 45...	2	2	...	...	3	3	1	1	3	1	3	5	6	1	...	...	2	3	1,166	566	1,732
45 to 50...	1	1	...	...	4	3	...	...	2	...	16	6	6	2	2	2	7	...	1,476	756	2,232
50 to 55...	1	2	...	...	3	1	...	....	1	...	7	3	3	...	2	...	...	1	697	354	1,051
55 to 60...	2	...	...	...	3	2	1	...	1	...	6	5	4	1	1	1	9	1	1,252	944	2,196
60 & over.	3	3	...	...	3	1	1	2	2	1	7	7	5	3	1	...	1	2	1,841	1,951	3,792
Unspecified Age.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14	...	14
ALL AGES. Males ...	29	...	*1,226*	...	59	...	11	...	68	...	215	...	114	...	42	...	92	...	32,444	...	
ALL AGES. Females.	...	187	...	*840*	...	31	...	10	...	23	...	133	...	33	...	15	...	41	...	25,944	
ALL AGES. Persons...	216		*2,066*		90		21		91		348		147		57		133		.....		58,388

28

TABLE of DEATHS by DISEASE and

GENERAL

Title of Orders.	Occupation or Trade of Family.	Small-pox.	Measles.	Plague.	Fever. Scarlet Fever.	Fever. Enteric Fever.	Fever. Malarial Fever.	Fever. Ague and Remittent Fever.	Fever. Relapsing Fever.	Influenza.	Whooping Cough.	Diphtheria.	Cholera.	Diarrhœa.	Dysentery.	Puerperal Septicæmia.	Leprosy.
Professional	1 (a) Imperial Government Officials, Clerks, &c.	1	..	6	..	2	2	4	..	7	..	..	..	2	..	..	..
General	2 (b) Foreign Government Consuls, &c.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Government	3 (c) Native States, Chiefs, Staffs, Retinue, &c.	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
	4 (d) Mul. and Local Government Police, &c.	..	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..
	Post and Telegraph Office, Peons, &c.	6	..	5	..	..	3	11	..	15	.	..	21	2	2	..	..
Defence	5 (a) Army	10	2	8	..	14	22	3	4	137	..	..	17	17	53	..	1
	6 (b) Navy	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Learned Professions.	7 (a) Ministers of Religious, Professors, &c.	..	..	8	..	3	..	8	..	6	..	..	1	1	2	..	1
	8 (b) Law, Medical Literature (Science), &c.	..	..	..	..	1	2	..	..	6	..	..	1	1	1	..	..
	9 (c) Unlicensed Practitioners, Dentists, Opticians, Nurses, &c.	1	..	2	..	..	..	5	..	2	..	..	3	1	..	..	1
Commercial	10 (a) General Merchants in Special Goods	4	..	31	..	9	8	20	..	32	..	..	6	16	11	..	..
	11 (b) Bankers, Accountants, Clerks, Capitalists, Shroffs, &c.	6	..	40	..	6	2	42	..	59	..	..	9	10	12	..	1
	12 (c) Shopkeepers, other General Dealers, Hawkers, etc.	11	1	16	..	3	5	125	1	105	..	..	34	57	27	7	4
	13 (d) Intoxicating Drinks and Drugs Dealers	..	..	2	..	..	..	6	..	9	..	..	2	..	1	..	1
	14 (e) Vegetable Food Dealers	..	..	..	..	..	..	1	..	2	..	..	..	..	1	..	..
	15 (f) Vegetable Substance Makers and Dealers	1	..	4	..	..	..	1	..	2	..	..	..	1	..	..	..
	16 (g) Animal Food Dealers, Fishers, &c.	2	..	3	..	..	..	14	..	5	..	..	9	6	..	5	11
	17 (h) Animal Substance Makers and Dealers	3	..	6	..	..	..	10	..	14	..	..	9	4	2	..	2
	18 (i) Entertainers, Hotel, Club, Refreshment House Keepers	1	..	3	..	1	..	11	..	8	..	..	1	1	1	..	..
	19 (j) Carriers on Road, Horse, Carriage, Cart Keepers	3	..	16	..	..	..	75	1	69	..	..	27	19	21	..	1
	20 (k) Carriers on Seas, Boatmen, Seamen, &c.	7	..	5	..	5	15	22	..	17	..	..	13	8	9	..	2
Railway	21 (a) Officials, Clerks, &c.	1	..	1	..	..	1	3	..	5	..	..	1	1	1	..	..
	22 (b) Workshop Servants, &c.	..	..	1	..	..	..	11	..	6	..	..	3	1	3	..	..
	23 (c) Labourers, Earth-workers, &c.	3	..	7	..	..	1	17	..	13	..	..	5	3	3	..	..
Port and Improvement Trusts and Harbour.	24 (a) Officials, Clerks, &c.	..	..	1	..	..	1	1	..	3	..	..	..	2	1	..	..
	25 (b) General Labourers, &c.	3	..	2	..	..	..	17	..	4	..	..	3	5	1	..	..
Tramway	26 (a) Officials, Clerks, &c.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	27 (b) General Labourers	2	..	..	..	..	1	1	..	2	..	..	..	1	1	..	..
Industrial	28 (a) Metal, &c., Workshop-keepers, Mechanical Tools Makers	3	..	5	..	1	..	6	..	1	..	.	..	..	2	..	..
	29 (b) Metal, &c., Workshop Servants, Labourers, &c.	3	..	5	..	1	2	29	..	25	..	..	16	9	8	..	..
	30 (a) Mills (Cotton, Silk, &c.), Masters, Managers, Clerks, &c.	..	..	..	..	1	..	2	..	1	..	..	2	2	2	..	..
	31 (b) Weavers, Spinners and other Workers	64	..	72	..	2	9	560	..	319	..	..	357	108	103	22	12
	32 (a) Presses (Printing, &c.), Printers, &c.	..	..	2	..	1	..	11	..	6	..	..	11	3	3	..	1
	33 (b) Other General Labourers	2	..	5	..	..	..	3	..	..	..	..	..	2	..	..	..

OCCUPATION in 1918.

DISEASES.							LOCAL DISEASES.											INJURIES.					
										RESPIRATORY SYSTEM.							GENERAL.					
Cancer.	Premature Birth.	Debility.	Old Age.	Tubercle of Lungs.	Other Tubercular Diseases.	Other General Diseases.	Nervous System.	Diseases of the Eye, Ear and Nose.	Circulatory System.	Phthisis.	Other Diseases of the Respiratory System.	Digestive System.	Lymphatic System.	Urinary System.	Generative System.	Organs of Locomotion and Connective Tissue.	Other local Diseases.	Drowning.	Other General Injuries.	Local Injuries.	Poison.	Unspecified Causes.	TOTAL.
..	..	..	2	2	..	2	4	..	3	1	10	6	..	1	..	..	..	..	2	..	..	1	58
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	1	...	..	..	..	..	...	..	..	..	..	...	..	..	2
..	..	..	1	..	..	1	..	..	..	..	5	1	..	..	..	..	..	..	..	..	..	..	12
..	..	..	4	3	2	4	2	..	4	6	65	5	..	3	..	1	..	..	1	2	..	..	167
2	..	20	2	233	26	61	13	2	21	10	236	38	..	7	1	8	1	..	4	12	..	..	1035
..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3
4	..	..	13	4	1	3	4	..	12	5	35	3	..	1	..	..	..	..	..	..	..	3	118
1	..	..	1	..	..	7	3	..	4	..	16	2	..	2	..	..	..	..	..	..	..	..	48
..	..	..	2	2	..	1	1	..	4	2	30	1	...	..	..	..	..	..	..	1	..	..	49
4	..	1	40	6	1	24	9	..	22	13	214	20	2	5	1	..	..	..	2	..	2	1	504
4	..	2	19	12	8	22	16	..	18	13	224	27	..	9	1	2	..	2	3	4	4	2	580
1	..	1	134	9	8	39	17	..	28	50	656	76	..	10	1	3	..	2	7	1	4	3	1479
1	..	..	10	..	1	2	2	..	2	2	19	2	..	..	..	..	..	..	2	..	..	..	64
..	..	..	5	..	..	..	..	..	..	1	8	1	..	..	..	..	..	..	..	..	1	..	20
..	..	..	4	..	..	..	..	..	..	1	26	..	..	..	..	..	..	1	1	1	..	..	43
..	..	..	23	..	..	4	1	..	1	7	57	5	..	..	..	..	..	1	1	..	..	..	160
..	..	..	11	..	1	8	3	..	1	12	48	10	..	3	..	..	..	1	1	1	..	..	172
..	..	..	4	..	..	6	..	..	1	5	41	3	..	..	..	..	..	..	3	..	3	1	94
1	..	..	42	7	2	17	8	..	9	32	389	16	..	5	..	1	..	2	7	6	..	..	781
..	..	..	18	10	1	8	5	..	6	8	159	9	..	1	..	..	2	1	4	5	1	3	339
1	..	..	1	3	...	2	1	..	2	1	13	..	..	2	1	1	..	..	1	..	..	..	43
..	..	..	2	2	..	4	..	..	2	2	29	3	..	1	..	..	..	..	1	1	..	1	72
..	..	..	3	2	..	..	1	..	1	2	63	2	..	..	..	1	..	..	4	..	..	..	131
..	..	..	..	1	..	1	1	..	..	2	5	1	..	2	..	..	..	..	..	1	2	..	25
..	..	..	8	2	1	3	1	..	1	3	57	4	..	1	..	..	..	1	4	2	..	..	123
..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	1	..	..	..	..	..	..	4
..	..	..	..	1	..	..	..	..	1	2	14	1	..	..	..	..	..	..	1	..	..	..	28
..	..	..	1	..	..	..	1	..	2	1	7	3	..	1	..	..	..	..	..	1	..	..	35
1	..	..	15	11	4	13	7	..	9	10	134	17	..	3	..	1	..	..	7	1	..	1	332
..	..	..	1	..	1	2	..	..	1	1	9	3	..	..	..	..	..	..	..	..	1	..	29
1	..	..	298	12	5	60	15	..	9	146	1605	77	..	11	3	2	1	12	23	10	9	2	3929
..	..	..	12	1	2		1	..	3	5	47	9	..	1	1	..	..	..	..	..	..	..	122
..	..	..	1	1	..	..	1	..	..	4	26	3	..	1	..	..	..	..	..	..	..	..	49

TABLE of Deaths by DISEASE and

Title of Orders.	Occupation or Trade of Family.	GENERAL.																
					FEVER.													
		Small-pox.	Measles.	Plague.	Scarlet Fever.	Enteric Fever.	Malarial Fever.	Ague and Remittent Fever.	Relapsing Fever.	Influenza.	Whooping Cough.	Diphtheria.	Cholera.	Diarrhœa.	Dysentery.	Puerperal Septicæmia.	Leprosy.
Art	34 (*a*) Engineers, Photographers, Electricians, Architects	4	..	6	..	2	..	2	..	4	..	..	..	1	..	..	..
	35 (*b*) Builders in Boats, Houses, Coaches, &c.	6	..	8	..	1	..	4	..	..	..	..	..	2	3	..	..
	36 (*c*) Watchmakers, Gilders, Engravers, &c.	2	..	5	..	..	1	3	..	2	..	..	1	2	1	..	..
	37 (*d*) Metal Workers	4	..	6	..	1	1	26	..	30	..	..	7	19	13	..	1
	38 (*e*) Wood Workers	3	..	18	..	2	..	28	..	39	..	..	24	12	14	1	..
	39 (*f*) Stone Workers (Precious) ..	..	..	3	..	..	..	10	..	4	..	..	5	3	1	..	..
	40 (*g*) Leather Workers	5	..	13	..	..	..	32	..	36	..	..	16	5	12	..	1
	41 (*h*) Earth, Stone, Clay, &c., Workers	..	..	...	..	..	..	9	..	1	..	..	..	..	..	..	..
	42 (*i*) Textile Fabrics (Cotton, Silk, &c.), Workers	..	..	3	..	..	..	2	..	1	..	..	..	..	1	..	..
	43 (*j*) Dyers, Painters, &c.	..	..	4	..	..	..	12	..	13	..	..	9	7	2	1	..
	44 (*k*) Glass Workers	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
	45 (*l*) Salt Workers	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	46 (*m*) Water Workers	1	..	..	..	..	..	4	..	3	..	..	..	1	..	...	..
	47 (*n*) Miscellaneous Workers ..	6	..	16	..	1	3	68	..	45	..	..	24	17	14	1	2
	48 (*o*) Players, Actors, Dancers, Prostitutes, &c.	3	..	..	..	..	1	5	..	2	..	..	2	..	2	..	1
Agriculture ..	49 (*a*) Gardeners, Cultivators, Farmers, &c.	4	..	8	..	..	1	29	..	37	..	..	35	7	4	1	38
	50 (*b*) Grass, Hay, Forage, &c., Dealers	..	..	..	..	..	..	2	..	3	..	..	..	..	..	..	..
Other and unspecified.	51 (*a*) Barbers, Washers, Tailors, Cooks, Bakers, &c.	45	..	43	..	4	5	132	..	131	..	..	67	53	17	4	7
	52 (*b*) General Labourers	104	2	125	..	4	7	563	..	487	..	..	386	96	105	12	13
	53 (*c*) Domestic Servants, Bhistis, &c.	29	..	25	..	..	3	35	..	39	..	..	26	6	13	6	1
	54 (*d*) Servants not otherwise described	22	..	98	..	5	10	132	..	131	..	..	56	25	25	2	1
	55 (*e*) Municipal Bigaries, &c.	..	..	7	..	..	3	37	..	33	..	..	20	10	12	2	..
Persons of independent means.	56 (*a*) Landlords	2	..	2	..	..	..	4	..	4	..	..	..	1	..	..	..
	57 (*b*) Pensioners	..	..	..	..	1	..	3	..	5	..	..	1	2	1	..	..
	58 (*c*) Mendicants, &c.	5	..	9	..	1	3	36	..	37	..	..	19	29	15	1	7
Others	59 (*a*) Students	5	..	24	..	8	5	21	..	26	..	..	4	5	5	..	1
	60 (*b*) Prisoners and Convicts ..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	...	..
	61 (*c*) Others (Pilgrims, Travellers, etc.)	..	..	..	..	..	1	3	..	..	..	..	..	1	..	1	..
	62 Persons following no occupations—Male ..	44	..	75	..	4	18	91	2	282	..	..	55	58	31	1	6
	63 Do. no occupations—Female ..	83	4	156	..	28	38	747	1	917	..	1	221	294	120	256	4
	64 Do. no occupations—Children ..	501	477	186	..	12	26	1,158	..	615	11	5	133	887	319	1	1
	Total ..	1,024	486	1,143	Nil	125	200	4,219	9	3,964	11	6	1,662	1,796	1,001	324	124

—concld.

OCCUPATION in 1918—*concluded.*

DISEASES.							LOCAL DISEASE.										INJURIES.					
										RESPIRATORY SYSTEM.							GENERAL.					
Cancer.	Premature Birth.	Debility.	Old Age.	Tubercle of Lungs.	Other Tubercular Diseases.	Other General Diseases.	Nervous System.	Diseases of the Eye, Ear and Nose.	Circulatory System.	Phthisis.	Other Diseases of the Respiratory System.	Digestive System.	Lymphatic System.	Urinary System.	Generative System.	Organs of Locomotion and Connective Tissue.	Other Local Diseases.	Drowning.	Other General Injuries.	Local Injuries.	Poison.	Unspecified Causes.	TOTAL.
..	..	..	8	2	1	4	3	..	..	2	23	4	..	..	..	..	..	..	..	..	..	..	66
..	..	..	8	2	..	..	..	..	..	1	19	5	..	..	..	..	..	..	1	1	..	..	56
..	..	..	3	..	..	1	1	..	..	1	14	1	..	1	..	1	..	..	2	..	1	..	43
..	..	..	22	1	3	4	4	1	1	15	147	10	..	5	1	1	..	..	2	1	..	1	317
1	..	1	41	5	1	6	6	..	1	11	176	12	1	4	1	1	..	..	1	2	2	..	414
..	..	..	10	1	..	..	1	..	..	3	27	1	..	..	..	..	..	..	..	1	..	..	70
..	..	1	33	..	..	3	2	..	2	16	138	5	..	2	..	..	..	..	..	.	..	..	322
..	..	..	1	..	..	..	..	..	..	..	20	..	..	..	..	..	..	..	..	..	1	..	32
..	..	..	5	1	..	1	..	..	..	2	13	..	..	..	..	..	..	2	..	..	..	..	31
..	..	2	12	4	..	4	2	..	3	4	63	7	..	1	..	..	..	..	3	2	..	..	155
..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	3
..	..	..	..	..	1	..	..	..	..	..	.	1	..	..	..	..	..	..	..	..	..	..	2
..	..	..	1	..	..	..	..	..	..	1	8	2	..	..	..	..	..	..	..	1	..	..	22
2	..	1	68	4	1	8	6	..	4	28	254	14	..	2	..	..	1	..	4	1	1	..	596
..	..	..	3	2	1	3	..	..	..	6	25	3	..	1	..	2	..	..	..	1	..	1	68
1	..	..	39	2	1	3	1	..	5	10	158	15	..	3	..	1	..	..	3	1	..	1	408
..	..	..	2	..	..	1	..	..	..	..	9	..	..	..	..	..	..	..	..	..	..	..	17
2	..	2	277	23	12	24	16	1	29	53	607	30	..	11	1	3	..	5	3	2	2	2	1,663
..	..	6	206	36	11	59	20	..	18	158	1,946	93	..	13	10	6	1	5	34	18	5	9	4,560
3	..	..	26	12	3	8	4	1	4	12	194	15	..	3	..	1	..	..	5	3	..	2	479
3	..	..	56	23	6	40	16	..	12	46	610	51	..	7	..	6	1	4	5	1	..	4	1,398
..	..	..	20	7	4	10	2	..	3	17	183	18	..	1	1	..	..	1	2	..	..	1	439
..	..	..	8	..	1	1	3	..	2	2	16	2	..	1	..	..	..	..	..	..	..	1	50
3	..	..	53	1	..	6	3	..	4	1	28	..	..	1	1	..	1	..	..	1	..	..	121
1	..	6	35	22	11	15	7	..	10	43	261	3	..	10	..	2	1	1	10	1	..	9	665
..	..	..	1	2	1	7	5	..	1	7	78	3	..	1	..	..	..	..	5	2	..	2	219
..	..	..	..	1	..	1	..	..	1	..	1	2	1	..	..	..	..	..	7	..	..	..	16
..	..	..	..	..	..	7	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	17
6	..	24	291	81	25	52	47	1	43	32	676	60	1	29	6	11	3	18	30	20	3	38	2,214
40	..	25	1,285	94	37	486	116	3	86	648	3,437	258	5	83	170	27	7	14	72	19	9	26	9,857
1	368	3,319	..	9	33	1,663	2,362	2	16	73	10,092	957	3	19	16	9	2	18	80	20	5	19	23,118
84	368	3,411	3,241	655	267	2,713	2,749	11	413	1,591	23,487	1,920	13	268	216	90	21	91	348	147	57	133	58,388

TABLE of DEATHS by Race, Age and Sex in 1918.

RACE OR CASTE.	Ages.																			
	1 to 30 days.		1 to 6 months.		7 to 12 months.		1 to 2 years.		2 to 3 years.		3 to 4 years.		4 to 5 years.		5 to 10 years.		10 to 15 years.		15 to 20 years.		20 to 25 years.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Jains	74	50	102	98	138	125	93	105	29	26	10	18	16	8	27	41	54	41	108	114	165	153
Brahmins	67	49	112	80	138	106	62	88	28	24	18	16	13	13	29	46	50	43	106	116	155	115
Lingaits	6	12	14	16	22	21	14	22	13	23	10	10	3	7	10	8	2	6	9	7	15	15
Bhatias	14	4	19	12	15	11	8	4	3	3	4	5	2	2	8	4	4	5	12	16	6	14
Hindus of Other Castes ...	966	755	952	830	1,169	1,157	870	879	382	447	242	268	216	207	535	637	471	505	1,272	1,065	2,007	1,317
Hindus, Low Castes... ...	312	245	413	424	569	570	350	385	173	160	101	108	57	65	221	205	121	146	241	245	385	363
Mussalmans	330	266	421	403	437	413	393	365	142	161	86	99	56	66	173	205	135	348	360	427	649	450
Parsees	39	28	26	24	50	61	60	50	21	18	13	14	7	7	20	17	6	18	28	39	28	39
Jews	7	9	11	15	11	11	12	13	7	7	4	3	2	5	5	7	4	7	7	12	1	5
Indian Christians	108	90	93	94	61	60	65	50	26	18	18	25	10	9	39	41	37	31	112	56	126	102
Eurasians	5	1	6	5	9	3	6	3	1	1	2	1	...	1	2	5	4	3	4	2	12	5
Europeans	8	4	2	6	1	3	2	4	3	1	5	2	...	1	2	...	1	1	7	4	28	6
Negro-Africans	1	...	1	1	1	...	1	1	...	...	...	...	...	...	...	...	...	...	...	3	2	...
Buddhists	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	1	18	...
Other and Unknown Castes ...	22	14	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2	4	...	...
Total ... Males ...	1,959	...	2,172	...	2,621	...	1,936	...	828	...	513	...	382	...	1,071	...	889	...	2,274	...	3,597	...
Total ... Females ...	...	1,528	...	2,008	...	2,541	...	1,969	...	891	...	569	...	391	...	1,216	...	1,054	...	2,111	...	2,584
Total ... Persons ...	3,487		4,180		5,162		3,905		1,719		1,082		773		2,287		1,943		4,385		6,181	

TABLE of DEATHS by Race, Age and Sex in 1918—*concluded.*

Race or Caste.	Ages—*concld.*																			
	25 to 30 years.		30 to 35 years.		35 to 40 years.		40 to 45 years.		45 to 50 years.		50 to 55 years.		55 to 60 years.		60 and over.		Unspecified Age.		All Ages.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females	Males.	Females	Males.	Females.	Males.	Females.	Persons.
Jains	118	71	80	47	62	26	57	26	60	24	40	26	44	25	72	62	...	...	1,349	1,086	2,435
Brahmins	107	76	69	57	77	51	45	21	60	29	45	18	39	28	63	62	...	...	1,283	1,038	2,321
Lingaits	14	13	7	4	7	9	2	1	5	3	3	2	9	6	12	13	...	...	177	198	375
Bhatias	5	9	7	11	4	10	10	6	6	6	12	9	9	6	25	16	...	...	173	153	326
Hindus of Other Castes	1,933	1,109	1,340	664	1,067	504	589	299	760	378	349	156	614	448	833	941	9	...	16,576	12,566	29,142
Hindus, Low Caste	344	303	206	145	179	162	93	57	146	101	33	18	147	170	157	194	...	...	4,238	4,046	8,284
Mussalmans	684	398	425	222	448	208	223	96	286	134	123	59	305	180	460	411	2	...	6,138	4,811	10,949
Parsees	28	48	29	36	38	47	39	30	49	30	43	37	32	30	122	150	...	...	678	723	1,401
Jews	7	8	5	7	4	5	4	5	3	...	3	5	3	8	14	19	...	...	114	151	265
Indian Christians	123	112	99	50	68	47	65	32	66	37	35	17	39	33	62	59	...	...	1,252	963	2,215
Eurasians	7	3	8	5	9	2	12	3	5	7	6	3	4	3	6	12	...	...	108	68	176
Europeans	44	12	27	15	30	10	22	10	24	7	14	4	5	6	12	12	1	...	238	108	346
Negro-Africans	1	3	1	...	3	...	...	...	1	...	...	...	1	...	3	..	...	...	16	8	24
Buddhists	17	...	14	1	9	...	4	...	5	...	1	...	...	...	...	...	...	...	74	3	77
Other and Unknown Castes ...	...	...	...	1	2	...	1	...	...	...	...	...	1	1	...	...	2	...	30	22	52
Total ... Males	3,432	...	2,317	...	2,007	...	1,166	...	1,476	...	697	...	1,252	...	1,841	...	14	...	32,444	...	
Total ... Females	...	2,165	...	1,265	...	1,081	...	566	...	756	...	354	...	944	...	1,951	...	...	...	25,944	
Total ... Persons	5,597		3,582		3,088		1,732		2,232		1,051		2,196		3,792		14		58,388		

TABLE showing by Race the Rate of Mortality per 1,000 of Population from different Death Causes in 1918 :—

Race or Caste.	Small-pox.	Measles.	Plague.	All Fevers.	Scarlet.	Enteric.	Malaria.	Ague and Remit-tent.	Relaps-ing.	Influ-enza.	Cholera.	Diar-rhœa.	Dysen-tery.	Phthisis.	Respira-tory Diseases.	Acci-dents.	All other Causes.	All Causes.
Jains	1·36	2·34	7·28	8·40	.....	·29	·58	7·52	.....	6·54	·29	1·95	·87	2·19	57·42	1·51	28·78	119·01
Brahmins	1·00	·61	1·62	3·95	.....	·09	·27	3·57	.....	2·79	·48	1·06	·59	1·41	19·25	·41	10·04	43·25
Lingaits	3·39	1·69	1·69	32·23	.....	.....	.....	32·23	.....	20·35	3·39	10·17	7·63	11·02	146·73	1·69	78·03	318·06
Bhatias	1·15	·25	1·28	3·85	.....	·38	·12	3·34	.....	·77	·12	2·18	·51	1·54	16·83	·38	12·98	41·90
Hindus of other Castes	·91	·40	1·09	4·61	.....	·08	·14	4·37	·007	3·64	2·31	1·63	·97	1·96	21·65	·64	13·41	53·25
Hindus, Low Caste	2·54	1·82	1·19	9·95	.....	·03	·11	9·80	.....	12·05	3·48	5·10	2·76	3·81	66·91	·94	42·13	162·74
Hindus, All Castes	*1·06*	*·59*	*1·33*	*5·13*	.....	*·08*	*·16*	*4·87*	*·005*	*4·32*	*2·17*	*1·89*	*1·08*	*2·08*	*26·28*	*·67*	*15·98*	*62·64*
Mussalmans	·53	·28	·78	4·30	.....	·03	·21	4·02	·02	3·12	·32	1·85	·93	3·66	23·46	·54	21·37	61·18
Parsees	·47	·21	·60	1·59	.....	·37	·31	·90	.....	3·20	·23	1·11	·45	·45	7·18	·41	11·56	27·50
Jews	·60	·15	·30	3·03	.....	·15	·30	2·57	.....	2·42	·15	1·21	·75	1·21	14·40	·60	15·30	40·16
Indian Christians...	3·39	·31	1·21	2·90	.....	·26	·41	2·22	.....	5·01	2·03	2·03	·99	2·15	16·93	·53	16·13	53·66
Eurasians	·95	·47	·71	2·38	.....	·71	·95	·71	.....	3·82	.....	1·42	·95	3·82	11·70	·71	15·04	42·02
Europeans	2·01	·25	·33	2·35	.....	1·84	·42	·08	.....	2·43	1·35	·92	1·26	1·00	4·28	1·26	11·60	29·09
Buddhists	.....	.....	.....	10·38	.....	5·19	5·19	.....	.....	17·30	.....	1·73	.....	20·76	27·68	3·46	51·90	133·21
Other and Unknown Castes ..	7·35	.....	.....	7·35	.....	.....	.....	7·35	.....	14·70	.....	7·35	.....	7·35	80·88	125·00	132·35	382·35
Total ...	1·04	·49	1·16	4·66	.....	·12	·20	4·30	·009	4·04	1·69	1·83	1·02	2·29	23·97	·65	16·72	59·61

TABLE of BIRTHS in different months by Caste and Sex in 1918.

MONTHS.	Jains.		Brahmins.		Lingaits.		Bhatias.		Hindus of Other Castes.		Hindus, Low Castes.		Musselmans.		Parsees.		Jews.		Native Christians.		Eurasians.		Europeans.		Negro-Africans.		Buddhists.		Other and Unknown Castes.		TOTAL.		
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
January	26	24	31	28	3	2	6	5	542	460	177	157	195	162	75	70	10	10	43	34	3	5	15	6	...	...	2	1	1	1	1129	965	2,094
February	23	25	24	24	3	3	8	8	405	389	145	125	160	130	58	54	7	9	53	36	2	1	9	8	...	...	...	1	...	...	897	813	1,710
March	32	29	39	36	3	2	4	4	424	376	133	126	185	171	48	54	12	8	39	38	6	4	13	7	...	2	...	...	...	...	938	857	1,795
April	21	20	32	25	4	3	9	5	411	337	135	135	143	151	53	64	6	5	47	46	7	3	9	5	1	1	1	...	1	...	880	798	1,678
May	15	11	25	28	3	4	3	2	388	331	151	116	179	136	60	56	15	9	32	41	5	5	4	7	...	...	1	...	...	...	881	746	1,627
June	7	11	22	21	6	2	3	3	373	341	102	134	176	153	48	50	10	6	38	41	5	3	8	7	...	...	1	...	...	...	799	772	1,571
July	19	11	30	26	1	4	3	5	443	386	142	125	171	156	66	54	15	10	47	33	3	4	5	11	1	1	2	...	...	1	948	827	1,775
August	14	12	30	23	4	1	10	2	438	392	170	155	191	178	66	52	13	7	60	60	5	4	7	7	...	...	1	1	1	...	1,016	894	1,904
September... ...	17	21	27	29	5	2	6	5	424	365	148	141	161	156	48	53	7	12	40	45	4	8	8	9	...	...	1	...	...	...	896	846	1,742
October	20	15	13	21	2	6	6	2	446	354	154	132	174	159	62	41	13	7	43	46	5	5	10	9	...	...	1	...	1	1	950	798	1,748
November	24	21	42	26	4	4	6	5	480	470	171	152	198	154	74	78	7	7	43	42	6	3	14	11	...	...	...	2	...	...	1,069	975	2,044
December	22	18	20	31	3	6	6	5	493	495	181	158	160	175	58	54	14	18	43	50	5	3	11	14	...	...	...	1	...	3	1,014	1,031	2,045
Total ... Males ...	240	...	335	...	41	...	70	...	5,267	...	1,809	...	2,093	..	716	...	124	...	528	...	59	...	113	...	2	...	10	...	4	...	11,411	...	21,733
Total ... Females.	...	218	...	318	...	39	...	51	...	4,696	...	1,656	...	1,881	...	680	...	106	...	512	...	48	...	101	...	4	...	6	...	6	...	10,322	
Total ... Persons.	458		653		80		121		9,963		3,465		3,974		1,396		230		1,040		107		214		6		16		10		21,733		21,733

TABLE showing the number of Still-births by Race and Month in 1918.

MONTHS.	MALES.																FEMALES.																PERSONS.															
	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Castes.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Other and Unknown Castes.	Total.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Other and Unknown Castes.	Total.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Other and Unknown Castes.	Total.
January.. ..	1	1	..	..	64	17	14	4	1	1	..	..	..	..	1	104	3	2	..	2	35	5	11	2	1	2	1	..	..	..	4	68	4	3	..	2	99	22	25	6	2	3	1	..	..	..	5	172
February ..	4	6	..	4	27	2	15	..	1	6	..	..	..	..	2	67	1	3	2	..	33	8	10	1	1	4	..	..	..	..	2	65	5	9	2	4	60	10	25	1	2	10	..	..	..	..	4	132
March	1	3	1	1	41	12	14	3	1	4	..	1	..	...	1	83	2	1	2	1	23	8	10	4	..	1	..	..	..	..	2	54	3	4	3	2	64	20	24	7	1	5	..	1	..	..	3	137
April	..	5	..	2	42	15	15	5	1	4	1	1	..	..	..	91	..	..	..	1	28	9	14	1	..	3	..	1	..	..	..	57	..	5	..	3	70	24	29	6	1	7	1	2	..	..	..	148
May	1	2	..	1	54	12	23	2	..	2	..	..	..	..	1	98	1	3	..	..	22	14	10	2	..	4	1	..	..	..	..	57	2	5	..	1	76	26	33	4	..	6	1	..	..	..	1	155
June	3	5	..	1	40	15	11	2	..	6	..	2	..	..	1	86	..	4	..	1	23	6	8	3	..	6	..	1	..	..	1	53	3	9	..	2	63	21	19	5	..	12	..	3	..	..	2	139
July	1	6	1	2	43	19	18	4	..	6	..	1	..	..	2	103	1	1	..	..	27	16	13	1	1	4	..	1	..	..	1	66	2	7	1	2	70	35	31	5	1	10	..	2	..	..	3	169
August	1	3	..	..	45	16	18	3	2	2	..	..	..	..	1	91	..	1	..	1	30	8	13	4	1	3	..	1	..	..	1	63	1	4	..	1	75	24	31	7	3	5	..	1	..	..	2	154
September ..	6	3	..	2	54	23	29	4	2	5	1	..	..	..	2	141	3	7	1	1	49	18	12	4	..	7	..	..	..	..	3	105	9	20	1	3	103	41	41	8	2	12	1	..	..	..	5	246
October	5	9	2	2	65	19	28	4	1	5	...	..	..	..	3	148	7	3	3	..	38	16	24	1	..	5	..	..	..	..	1	98	12	12	5	2	103	35	52	5	1	10	..	..	..	..	4	241
November ..	2	2	1	2	51	16	22	2	..	4	..	1	..	..	1	104	5	2	1	..	27	11	13	5	..	6	..	2	..	..	1	73	7	4	2	2	78	27	35	7	..	10	..	3	..	..	2	177
December ..	4	7	..	2	51	18	21	2	1	4	..	1	..	..	4	115	4	1	..	1	39	11	17	1	..	7	..	..	..	..	..	81	8	8	..	3	90	29	38	8	1	11	..	1	..	..	4	196
Total ..	29	62	5	19	577	184	228	35	10	49	2	7	..	..	19	1,226	27	28	9	8	374	130	155	29	4	52	2	6	..	..	16	340	56	90	14	27	951	311	38	64	14	101	4	13	..	..	35	2,066

TABLE showing the number of Still-births by Section and Month in 1918.

MONTHS.	A					B				C						D					E							F			G		Harbour, Docks, Railways and Homeless.	Total.
	Upper Colaba.	Middle and Lower Colaba.	Fort, South.	Fort, North.	Esplanade.	Mandvi.	Chakla.	Umarkhadi.	Dongri.	Market.	Dhobi Talao.	Fanaswadi.	Bhuleshwar.	Khara Talao.	Kumbharwada.	Khetwadi.	Girgaum.	Chowpati.	Walkeshwar.	Mahalakshmi.	Mazagon.	Tarwadi.	2nd Nagpada.	Kamathipura.	Tardeo.	Byculla.	1st Nagpada.	Parel.	Sewri.	Sion.	Mahim.	Worli.		
January	..	3	..	3	5	2	1	12	1	2	9	3	4	4	9	5	10	4	1	2	4	9	6	8	5	17	..	12	2	4	7	23	..	172
February	..	2	..	3	..	4	3	6	3	2	3	6	5	5	4	2	7	3	3	4	2	4	2	5	2	14	1	7	2	6	8	14	..	132
March	..	1	5	..	5	1	4	4	6	2	4	4	4	2	5	4	10	2	3	..	4	5	4	3	5	4	15	1	8	7	6	2	7	..	137
April	..	2	1	..	5	5	4	4	8	2	2	2	5	2	3	2	12	4	3	2	6	5	5	6	11	5	12	..	10	1	5	1	13	..	148
May	..	2	..	3	4	3	4	11	3	3	10	4	6	3	3	7	5	2	2	4	5	7	7	9	4	17	1	4	4	4	2	12	..	155
June	..	4	..	4	1	2	3	5	2	1	7	6	2	3	7	5	10	4	1	6	4	8	4	4	2	11	..	2	4	6	3	18	..	139
July	..	4	..	3	1	1	1	9	3	3	8	6	3	10	6	3	7	1	3	5	7	14	9	7	5	14	1	10	2	8	4	11	..	169
August	..	1	..	..	7	1	5	1	7	5	6	4	8	5	6	4	3	3	1	1	5	13	2	7	10	4	13	1	5	5	3	5	13	..	154
September	..	1	..	..	4	17	7	13	4	8	10	8	5	4	11	13	7	4	1	7	5	16	10	15	6	19	1	8	5	6	9	23	...	246
October	..	2	..	5	3	12	1	8	5	9	19	6	16	6	6	9	12	4	2	6	8	10	4	14	5	21	2	13	4	6	10	22	..	241
November	..	7	..	6	..	6	6	11	6	4	7	5	2	5	6	8	9	..	2	7	5	6	2	8	7	15	2	7	4	5	5	14	..	177
December	..	5	..	2	4	7	2	6	4	1	8	8	13	6	4	11	6	3	3	4	5	9	3	11	3	23	1	7	5	12	5	15	..	196
Total	4	36	..	46	29	67	37	102	40	45	82	69	65	60	66	88	82	32	21	60	68	94	63	102	52	191	11	93	45	71	61	184	..	2,066

STATEMENT showing the number of DEATHS from Principal Causes in different Hospitals in the City of Bombay for the year 1918.

HOSPITALS.	GENERAL DISEASES.																						LOCAL DISEASES.																		Injuries.		Unspecified Causes.		TOTAL.		
	Stillborn.		Smallpox.		Measles.		Plague.		Fevers.		Cholera.		Diarrhœa and Dysentery.		Puerperal Septicæmia.		Leprosy.		Premature Birth.		Other General Diseases.		Nervous System.		Circulatory System.		Phthisis.		Other Diseases of the Respiratory System.		Digestive System.		Urinary System.		Generative System.		Other Local Diseases.									
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Persons.
Adams Wylie Memorial Hospital	..	..	..	..	..	..	..	..	1	5	..	..	20	2	..	..	..	..	...	..	35	14	..	1	3	1	50	9	38	11	9	2	3	2	1	..	2	..	..	..	..	..	162	47	209
Albless Cama Hospital	75	57	..	..	..	..	..	..	1	1	..	..	..	8	..	7	..	..	40	32	8	67	3	14	..	3	..	..	4	37	2	11	..	2	1	6	..	1	..	..	..	..	59	196	255
Arthur Road Hospital	1	3	228	98	3	1	..	1	2	..	154	64	22	2	..	..	..	..	..	..	254	78	..	..	1	..	1	..	59	18	..	1	..	..	..	..	..	..	..	..	..	..	724	261	985
Ayurvedic Hospital	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bai Motiabai and Sir D. M. Petit Hospital	67	71	..	..	..	..	..	..	1	2	..	..	1	7	..	2	..	..	9	20	10	21	14	9	1	3	..	..	26	39	8	3	..	2	4	14	...	3	1	1	..	..	75	126	201
Bai Rukshamani Lying-in-Hospital	12	9	..	..	..	..	...	..	..	..	..	..	..	..	..	1	..	..	11	4	..	1	3	2	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	14	19	33
Dr. Bhajekar's Hospital	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	5	2	1	..	1	..	..	..	1	1	6	..	1	1	..	..	..	..	...	..	..	..	17	4	21
B. D. Petit Parsee General Hospital	..	..	..	..	..	..	..	..	1	3	...	..	1	4	..	..	..	..	..	..	10	6	6	1	1	1	..	...	5	5	1	..	2	2	..	..	1	..	...	1	..	..	28	23	51
Colaba Station Hospital	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Goculdas Tejpal Hospital	..	..	..	..	..	..	1	..	9	2	1	..	28	4	..	..	..	..	..	..	115	26	10	1	18	2	7	4	220	26	12	1	13	8	..	..	7	...	2	5	..	..	488	79	567
Sir J. J. Hospital	..	..	1	..	..	..	..	..	34	11	2	1	69	24	..	..	1	..	2	..	300	86	40	7	27	5	48	19	390	67	104	16	20	8	8	5	29	12	48	23	..	..	1123	284	1407
Lady Hardinge War Hosp.	..	..	..	..	..	..	..	..	7	..	..	..	11	1	..	..	..	..	..	..	119	1	7	..	4	..	2	..	39	2	4	..	1	..	..	..	7	..	3	..	..	..	204	4	208
Dr. Kerrawalla's Hospital	11	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	4	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	6	3	9
Marine Lines War Hospl.	..	..	..	..	..	..	..	..	14	..	..	..	..	1	..	..	..	..	..	..	115	2	3	..	3	..	5	..	63	1	12	...	1	..	..	..	2	..	2	..	..	..	221	3	224
Matunga Leper Asylum	..	..	..	..	..	..	..	..	..	..	1	2	2	..	..	..	81	19	..	...	5	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	90	23	113
Maratha Hospital	2	..	..	1	2	..	208	49	1	1	..	1	2	2	..	..	..	..	..	1	27	10	1	1	..	..	2	1	18	..	..	..	..	..	..	..	..	..	..	..	..	..	254	67	321
Municipal Maternity Home Belasas Road	17	14	..	..	..	..	...	..	..	..	..	..	..	1	..	..	..	..	13	3	4	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	4	22
Municipal Maternity Home, Colaba	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	4
Municipal Maternity Home, Parel	14	12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	4	4	2	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	11	8	19
Dr. Masina's Hospital	6	9	..	..	..	..	..	..	4	4	..	..	3	..	..	..	..	..	7	5	17	17	5	1	1	..	..	..	12	3	7	4	5	2	1	2	6	..	1	...	..	..	69	38	107
Dr. Parekh's Hospital	5	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	1	2	..	..	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	6	5	11
Parsee Fever Hospital	..	..	..	..	..	..	4	6	..	..	1	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	11	14	..	..	..	..	..	..	..	..	..	..	..	..	17	21	38
Parsee Lying-in-Hospital	8	11	..	..	..	..	3	..	3	..	..	..	..	..	..	..	3	4	1	2	..	..	..	..	..	1	..	..	6	2	..	1	..	..	..	..	1	..	..	..	..	..	14	10	24
Police Hospital	..	..	..	..	..	..	3	..	3	..	..	..	1	..	..	..	..	..	..	..	6	..	1	..	1	..	..	..	20	..	1	...	..	..	..	..	..	..	..	..	1	..	37	..	37
St. Joseph's Foundling Home	..	..	..	..	..	..	..	..	6	12	..	..	2	1	..	..	...	...	3	4	44	40	5	4	..	1	..	..	3	7	7	12	3	2	..	..	1	1	..	..	..	..	74	84	158
St. George's Hospital	..	1	13	5	1	1	1	..	14	10	..	2	7	7	..	1	..	..	1	2	83	19	8	4	5	2	4	..	38	18	8	2	1	3	..	..	1	1	...	..	..	..	135	77	212
Colaba War Hospital	1	..	6	..	..	..	..	..	5	..	3	..	7	..	..	..	..	..	..	..	24	2	4	..	3	..	2	..	9	2	8	..	2	..	1	..	..	..	1	..	..	..	75	4	79
Victoria War Hospital	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	..	..	..	..	..	8	..	..	..	..	..	1	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	20	..	20
Labour Corps War Hospl.	..	..	2	..	..	..	1	..	24	..	11	..	45	..	..	..	1	..	..	..	364	..	5	...	12	..	5	..	145	1	19	..	3	..	..	..	5	..	3	..	1	..	646	1	647
Gerard Freeman Thomas War Hospital	..	..	..	..	..	..	..	..	2	..	..	..	4	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	2	..	5	..	..	..	..	..	..	..	..	..	..	15	..	15
Jain Hospital	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	...	..	..	..	..	..	..	..	..	..	..	2	1	3
Cumballa Hill War Hospl.	..	..	..	..	..	..	..	..	..	..	4	..	4	..	..	..	..	...	..	..	6	..	2	..	1	..	..	..	10	..	1	..	..	..	..	..	..	..	..	..	..	..	28	..	28
Dr. D'Sa's Hospital	6	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	4
Bombay Hospital for Women and Children	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1
Memon General Hospital	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	4
Maharaja Gaikwar's Officer's War Hospital	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	..	3
Boris Hospital	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
TOTAL.. Males	231	..	250	..	6	..	218	..	134	..	176	..	238	..	..	..	83	..	104	..	1526	..	122	..	81	..	127	..	1122	..	216	..	55	..	17	..	62	..	62	..	2	..	4,596	..	..
TOTAL.. Females	..	203	..	104	..	2	..	56	..	51	..	70	..	68	..	11	..	19	..	95	..	400	..	46	..	26	..	33	..	258	..	53	..	33	..	28	..	18	..	30	..	..	..	1,396	
TOTAL.. Persons	434		354		8		269		185		246		301		11		102		199		1,926		168		107		160		1330		269		88		45		80		92		2				5,992

35

TABLE showing the Number of Plague Deaths by Streets and Races during 1918.

Locality.				Races.															
Ward.	Section.	Street.	Population by Census of 1911.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Upper Colaba.																	
A	Upper Colaba.	Pilot Bunder Road	1,557	...	...	...	...	2	1	...	...	...	...	1	...	...	...	...	3
		Middle and Lower Colaba.																	
	Middle and Lower Colaba.	Arthur Bunder Road	19,619	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
		Borah Street		...	...	...	...	12	...	...	...	...	...	...	...	...	...	...	12
		Colaba Causeway ...		...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	2
		Colaba Road		1	...	...	...	6	...	1	1	...	...	...	...	...	...	...	9
		Gun Carriage Road ...		...	...	...	...	9	1	..	...	...	...	...	...	...	...	...	10
		Hamal Street		...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	2
		Hormasjee Street ...		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
A		Kittredge Road ...		1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		1st Koli Lane ...		...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	5
		2nd „ „ ...		...	...	...	...	4	2	...	...	...	...	...	...	...	...	...	6
		3rd „ „ ...		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		4th „ „ ...		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Merewether Road ...		...	...	...	...	1	1	...	...	...	...	1	...	...	...	...	3
		Nowrojee Furdunji Road ...		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Nowroji Street		1	...	...	...	5	...	...	...	...	1	...	...	...	...	...	7
		Sassoon Dock		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Thomas Street		...	...	...	...	7	1	1	...	...	...	...	...	...	...	...	9
		Tullock Road		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Victoria Bunder Road ...		...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	4
		Wodehouse Road ...		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Fort, South.																	
	Fort, South.	Apollo Street	3,465	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
A		Custom House Road ...		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Forbes Street		...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
		Hammam Street		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Medows Street		...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	2
		Fort, North.																	
	Fort, North.	Agiary Lane	25,400	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Bomanji Lane		...	...	...	...	1	...	...	4	...	...	...	...	...	...	...	5
		Barber Lane		...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
		Bazar Gate Street		5	...	...	...	1	...	...	2	...	1	...	...	...	...	...	9
		Borah Bazar Street		4	2	...	...	6	...	...	...	...	...	...	...	...	...	...	12
		Cawasji Patel Street		...	...	...	...	1	...	...	1	...	1	...	...	...	...	...	3
		Cochin Street		...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	2
		Frere Road		...	...	...	...	2	...	2	...	...	...	...	...	...	...	...	4
		Goa Street		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Ghoga Street		...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
		Gunbow Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Homjee Street		...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	2
		Hornby Road		...	1	...	...	1	...	1	...	...	1	...	...	...	...	...	4
A		Jivaji Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Karwar Street		...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
		King Road		1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	3
		Kumpta Street		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Manordass Street		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Mangesh Senoi Street ...		...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	4
		Manglore Street		...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	2
		Maruty Lane		...	...	...	...	7	...	...	1	...	...	...	...	...	...	...	8
		Mint Road		2	...	...	...	5	...	1	...	...	...	...	...	...	...	...	8
		Mody Street		...	...	...	...	4	1	...	2	...	...	...	...	...	...	...	7
		Nicol Road		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Parsee Bazar Street		...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
		Pitha Cross Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Police Court Lane		...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
		Raghunath Dadaji Street ...		...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1

35—*continued.*

TABLE showing the Number of Plague Deaths by Streets and Races during 1918—*continued.*

Locality.				Races.															
Ward.	Section.	Street.	Population by the Census of 1911.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Esplanade.																	
A	Esplanade.	Carnac Road	17,761	1	...	...	...	3	4	2	...	...	...	...	...	...	...	...	6
		Cruickshank Road		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Hornby Road		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Market Road		...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	2
		Paltan Road		...	...	...	...	3	3	1	...	...	...	...	...	...	...	...	7
		Queen's Road		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Wallace Street		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Mandvi.																	
B	Mandvi.	Argyle Road	33,202	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
		Argyle Road Cross Lane		2	...	...	...	...	...	1	...	...	...	...	...	...	...	...	3
		Bhandup Street		1	...	...	..	....	...	...	...	...	...	...	...	...	...	...	1
		Chukla Street		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Chukla Cross Lane		2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Chinch Bunder Road		4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
		Clive Road		2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Coorla Street		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Dariasthan Street		2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	3
		DeSouza Street		6	...	...	...	1	...	...	...	...	...	...	...	...	...	...	7
		DeSouza Cross Lane		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Dongri Street		5	2	...	...	...	1	...	...	...	...	...	...	...	...	...	8
		Dontad Street		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Isaji Street		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Jambli Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Janjiker Street		1	...	...	...	2	1	1	...	...	...	...	...	...	...	...	5
		Kazi Sayad Street		5	1	...	...	...	1	...	...	...	...	...	...	...	...	...	7
		Khadak Street		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Kumbharwada Street		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Musjid Siding Road		2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Musjid Station Road		2	1	...	1	...	...	...	...	...	...	...	...	...	...	...	4
		Musjid Bunder Road		1	...	...	...	...	3	...	...	...	...	...	...	...	...	...	4
		Old Bengalpura Road		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		1st Samuel Street		3	1	...	1	...	...	...	...	...	...	...	...	...	...	...	5
		2nd „ „		1	...	...	2	...	...	...	...	...	...	...	...	...	...	...	3
		Chukla.																	
B	Chukla.	Bibijan Street	24,231	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Dhobi Street		1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2
		Husein Khan Khalifa Street		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Jackeria Musjid Road		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Kambeker Street		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Kolsa Street		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Memonwada Road		3	1	...	...	1	...	1	...	...	...	...	...	...	...	...	6
		Nagdevi Street		1	...	...	1	...	...	3	...	...	1	...	...	...	...	...	6
		Nagdevi Cross Lane		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Nakhoda Street		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Narayan Dhuru Street		3	1	...	...	...	...	1	...	...	...	...	...	...	...	...	5
		1st Narayan Dhuru Cross Lane		1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		Sarang Street		...	...	...	...	...	...	8	...	...	...	...	...	...	...	...	8
		Tava Lane		...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2

35—*continued.*

TABLE showing the Number of Plague Deaths by Streets and Races during 1917—*continued.*

Ward	Section.	STREET.	Population by the Census of 1911.	RACES. Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Umarkhadi.																	
B	Umarkhadi.	Babula Tank Road	45,679	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	3
		Chunam Kiln Road, Attar Lane		...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2
		1st Chinch Bunder Road ...		...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4
		Dongri Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Imamwada Compound, I. T. Chawl		...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	2
		Imamwada Road		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Jail Road, North		...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2
		Jail Road, West		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Jackeria Musjid Street... ...		...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	5
		Memonwada Road		...	...	...	...	...	...	4	...	...	...	...	...	...	...	...	4
		Nagdevi Street		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Nishanpada Road		1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	3
		Old Nagpada Road		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Bhendi Bazar, Parel Road ...		...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	5
		Samuel Street		1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		Tandel Street		...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	3
		Tantanpura Street		2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Umarkhadi Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Road Side		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Dongri.																	
B	Dongri.	Argyle Road	27,246	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Clive Road		...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	2
		Elphinstone Bridge		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Jail Road, East		2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	3
		Kalyan Street		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		1st Nowrojee, South		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		2nd Nowrojee, North		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Prince's Dock (Road Side) ..		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Valpakhadi Road		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Market.																	
C	Market.	Abdul Rehman Street ...	30,172	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	3
		Agiary Cross Lane		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Carnac Road		...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2
		Champa Cross Lane		3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
		Dhanji Street		2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Ganeshwadi		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Kalbadevi Road		1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Ladwady		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Lohar Chawl		3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
		Musjid Bunder Road		2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	3
		Mirza Street		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Mumbadevi Road		3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
		New Hanuman Lane		3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	4
		Old Hanuman Lane		4	1	...	...	2	...	...	...	...	...	...	...	...	...	...	7
		Ovalwady		...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Picket Road		1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	3
		Pinjari Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Princess Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Shaik Memon Street		4	...	...	...	1	2	...	...	...	...	...	...	...	...	...	7
		Sutar Chawl		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Telwady		1	...	...	...	1	2	...	...	...	...	...	...	...	...	...	4
		Vithalwady		2	...	...	1	...	1	1	...	...	...	...	...	...	...	...	5

35—*continued.*

TABLE showing the number of Plague Deaths by Streets and Races during 1918—*continued.*

Locality.				Races.															
Ward.	Section.	STREET.	Population by Census of 1911.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Dhobi Talao.																	
	Dhobi Talao.	Cavel Street	38,684	1	1	...	...	3	...	...	...	...	5	...	...	...	...	...	10
		Chandanwadi		...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	5
		Dadyshet Agiary Street		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		2nd Dhobi Talao Lane		...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
		Hamalwady		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Kalbadevi Road		1	2	...	...	2	...	...	...	...	...	...	...	...	...	...	5
C		Kolbhat Street		...	1	...	...	5	...	...	...	...	...	...	...	...	...	...	6
		Lohar Street		...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	2
		Mahadeo Shanker Set Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		1st Marine Lane		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		2nd Marine Lane		...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	3
		Trinity Street		...	...	...	...	1	...	...	...	...	2	...	...	...	...	...	3
		Wellington Street		1	...	...	...	1	...	...	1	...	1	...	...	...	...	...	4
		Fanaswadi.																	
	Fanaswadi.	Anantwadi	27,403	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		Bhasker Lane		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Cathedral Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Dukerwady		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Dadyshet Agiary Street		...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Fanaswadi Street		...	2	...	...	3	...	...	...	...	...	...	...	...	...	...	5
C		2nd Fanaswadi Street		...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	6
		Girgaum Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Hargovand Desai's Wadi		...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		2nd Khatter Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Sonapur Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Tadwady		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Thakurdwar Road		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Zaoba's Wadi		1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	3
		Bhuleshwar.																	
	Bhuleshwar.	Alli Umer Street	36,469	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2
		2nd Bhoiwada Lane		...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	3
		3rd Bhoiwada Lane		3	1	...	...	3	...	...	...	...	...	...	...	...	...	...	7
		Bhuleshwar Road		...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	3
		Bapu Khote Street		...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		Cawasji Patel Tank Road		...	1	...	...	4	...	...	...	...	...	...	...	...	...	...	5
		Erskine Road		...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	2
		2nd Fopal Wadi		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
C		3rd Fopal Wadi		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Girgaum Back Road		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Ghogari Street		...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	3
		Kika Street		3	...	...	...	3	...	...	...	...	...	...	...	...	...	...	6
		Kalbadevi Road		1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	3
		Maruty Lane		...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	3
		Musjid Street		...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	3
		Musjid Cross Lane		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Nizam Street		...	...	...	...	...	1	3	...	...	...	...	...	...	...	...	4
		Panchayet Wadi		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1

35—*continued.*

TABLE showing the Number of Plague Deaths by Streets and Races during 1918—*continued.*

Locality.			Population by Census of 1911.	Races.															
Ward.	Section.	Street.		Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Khara Talao.																	
	...	Agiary Street	22,979	...	...	...	...	...	...	2	...	...	..	...	...	...	...	...	2
		Bhendi Bazar, Parel Road ...		...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	3
		Chimna Butcher Street ...		...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2
	...	Dhabu Street		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
	...	Doctor Street		...	...	...	...	1	1	3	...	...	...	...	...	...	...	...	5
	...	Duncan Road		...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	2
C	Khara Talao.	2nd Duncan Cross Lane ...		...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	2
	...	Erskine Road		...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	3
		Gusar Street		...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	3
	...	Khara Tank Road		...	...	...	...	1	...	...	...	...	..	...	...	...	...	...	1
		Khoja Street		1	1	...	...	2	1	1	...	...	...	...	...	...	...	...	6
		Pakmodia Street		...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	3
		Kumbharwada.																	
		Ardesir Dady Street	27,703	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	3
		Bhandari Street		...	1	2	...	2	...	3	...	...	...	...	...	...	...	...	8
		2nd Bhandari Cross Lane ...		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		1st Carpenter Street		...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	5
		2nd Carpenter Street		...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4
	Kumbharwada.	Cawasji Patel Tank Road		...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	2
C		Duncan Road		...	...	...	...	3	2	...	...	...	...	...	...	...	...	...	5
		Islampura Street		...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2
		Khetwadi Main Road... ...		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Kumbharwada Road		..	...	...	...	4	...	2	...	...	...	...	...	...	...	...	6
		Northbrook Street		...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4
		1st Pathan Street		...	...	...	...	1	...	...	...	...	..	...	...	...	...	...	1
		2nd do.		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Trimbak Parshram Street ...		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Khetwadi.																	
		Falkland Road	31,937	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	2
		Girgaum Back Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	...	Khetwadi Main Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Khetwadi Back Road		...	1	...	1	...	...	...	1	...	...	...	...	...	...	...	3
		10th Khetwadi Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Grant Road		...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	2
D	Khetwadi.	1st Parsiwada		...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
		3rd do.		...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
	...	Lamington Road		...	1	1	1	1	...	...	...	...	...	...	...	...	...	...	4
	...	Proctor Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Sandhurst Road		...	..	...	1	...	...	...	...	...	...	...	...	...	...	...	1
		3rd Falkland Cross Lane ...		...	1	...	...	3	...	...	..	...	...	...	...	...	...	...	4

35—*continued.*

TABLE showing the Number of Plague Deaths by Streets and Races during 1918—*continued.*

Locality.				Races.																
Ward.	Section.	Street.	Population by Census of 1911.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Girgaum.																	
D	Girgaum.	Cow Lane	80,779	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Charni Road		...	3	...	1	2	...	...	...	...	...	...	...	...	...	...	6
		Girgaum Road		...	1	...	...	2	...	...	...	...	...	...	...	...	...	...	3
		Kandewadi Lane		...	2	1	2	...	...	...	...	...	...	...	...	...	...	...	5
		Khatur Alli Lane		...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
		Mugbhat Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Mugbhat Cross Lane		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Oval Wadi		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Sadashiv Street		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Thakurdwar Road		...	3	...	1	...	...	...	...	1	...	...	...	...	...	...	5
		Pimpal Wadi		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Queen's Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Chowpati.																	
D	Chowpati.	1st Bhatwady	11,897	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Chowpati Road		...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
		Damar Lane		...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4
		French Bridge Road		...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
		Girgaum Road		...	1	1	...	1	...	...	...	...	...	...	...	...	...	...	3
		Girgaum Back Road		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Kennedy Bridge Road		...	2	...	...	1	...	...	...	...	...	...	...	...	...	...	3
		Walkeshwar.																	
D	Walkeshwar.	Narayan Dabholkar Road	10,640	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Walkeshwar Road		...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
		Banganga Temple Compound		...	2	...	...	...	1	...	...	...	...	...	...	...	...	...	3
		Ridge Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Alexandra Road		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Mahalakshmi.																	
D	Mahalakshmi.	Arthur Road	26,302	...	...	1	...	6	2	...	...	...	...	...	...	...	...	...	9
		Bellasis Road		...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4
		Chikhalwadi		...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4
		Chikhalwadi Cross Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Gowalia Tank Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Pedder Road		...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		Sleater Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Tardeo Road		...	...	...	...	6	...	...	1	...	...	...	...	...	...	...	7
		Warden Road		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1

35—*continued.*

TABLE showing the Number of Plague Deaths by Streets and Races during 1918—*continued.*

Locality.				Races.																
Ward.	Section.	Street.	Population by Census of 1911.	Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Mazagon.																	
E	Mazagon.	Belvedere Road	30,075	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Coppersmith Lane		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		1st Carpenter Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		2nd Do.		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Dockyard Road		...	...	...	...	7	...	...	...	...	...	...	...	...	...	...	7
		DeLima Street		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Ghorupdeo Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Gunpowder Road		...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
		Mahtarpakhadi Road		3	...	...	...	...	...	...	1	...	3	...	...	...	...	...	7
		Magazine Road		...	...	...	...	4	...	...	...	...	...	...	...	...	...	...	4
		Rose Cottage Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Reay Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Victoria Road		...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	3
		Tarwadi.																	
E	Tarwadi.	Albert Road	28,424	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Babula Tank Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Connaught Road		...	...	...	...	6	4	3	...	...	2	...	...	...	...	...	15
		Ghorpdeo Road		1	...	...	...	4	...	...	...	...	...	...	...	...	...	...	5
		Love Lane		...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	3
		Mount Road		1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
		Nesbit Road		...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	3
		Parel Road		...	1	...	...	1	1	1	...	...	...	...	...	...	...	...	4
		Victoria Road		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		2nd Nagpada.																	
E	2nd Nagpada.	Bellasis Road	21,700	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	2
		Kajipura		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Mastan Tank Road		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Roadside		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Shaik Buran Street		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Kamathipura.																	
E	Kamathipura.	Kamathipura, 5th Street	36,761	...	...	...	...	3	...	1	...	...	...	...	...	...	...	...	4
		,, 6th Lane		...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	3
		,, 8th ,,		...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	2
		,, 9th ,,		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		,, 10th ,,		...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2
		,, 11th ,,		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		,, 12th ,,		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		,, 13th ,,		...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	2
		,, 14th ,,		...	...	...	...	2	1	1	...	...	...	...	...	...	...	...	4
		,, 15th Street		...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	2
		Bapty Road		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Bazar Road		...	2	...	...	3	1	...	...	...	...	...	...	...	...	...	6
		Bellasis Road		...	...	...	...	1	1	...	...	...	1	...	...	...	...	...	3
		North Brook Street		...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	2
		Stable Street		...	...	...	...	...	4	...	...	...	...	...	...	...	...	...	4

35—*continued.*

TABLE showing the Number of Plague Deaths by Streets and Races during 1918—*continued.*

Locality.			Population by Census of 1911.	Races.															
Ward.	Section.	Street.		Jains.	Brahmins.	Lingaits.	Bhatias.	Hindus of Other Castes.	Hindus, Low Caste.	Mussalmans.	Parsees.	Jews.	Indian Christians.	Eurasians.	Europeans.	Negro-Africans.	Buddhists.	Unknown.	Total.
		Tardeo.																	
E	Tardeo.	Balaram Street	27,758	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Bapti Road		...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	4
		Bellasis Road		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
		Falkland Road...		...	...	1	...	2	...	2	...	...	...	...	...	...	...	...	5
		Foras Road		...	...	1	...	3	...	...	...	...	...	...	...	...	...	...	4
		Gilder Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Grant Road		...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	3
		Jairajbhai Street		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
		Lamington Road		...	...	2	...	5	...	...	...	...	...	...	...	...	...	...	7
		Suklajee Street		...	...	...	...	3	...	2	...	...	...	...	...	...	...	...	5
		Byculla.																	
E	Byculla.	Agripada	75,878	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	3
		Arthur Road		...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	2
		Bellasis Road		...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	2
		Clare Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Chambhar Lane		...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	3
		Clarke Road		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		DeLisle Road		3	...	...	...	6	...	1	...	...	...	...	...	...	...	...	10
		DeLisle Cross Lane		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Haines Road		...	...	...	...	2	3	...	...	...	...	...	...	...	...	...	5
		Kalachowki Road		1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	2
		Kalapani		1	...	...	...	...	...	5	...	...	...	...	...	...	...	...	6
		Lamington Road		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Mahomedan Street		...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	4
		Morland Road		...	...	...	...	3	4	...	...	...	...	...	...	...	...	...	7
		Parel Road		3	...	...	...	4	1	...	...	...	...	...	...	...	...	...	8
		Reynold Road		...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1
		Ripon Road		1	...	...	...	...	...	5	...	...	1	...	...	...	...	...	7
		Sankli Street		...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	2
		1st Nagpada.																	
E	1st Nagpada.	Parel Road	6,414	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Parel.																	
F	Parel.	Arthur Road	45,475	...	...	...	...	7	...	...	...	...	...	...	...	...	...	...	7
		Currey Road		...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	2
		Government Gate Road ...		...	...	1	...	1	1	1	...	...	...	...	...	...	...	...	4
		Government House Compound		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
		Kalachowki Road		1	1	...	...	5	...	1	...	...	...	...	...	...	...	...	8
		Lalwadi		...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	4
		Parel Road		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Parel Village		...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	2
		Suparibag Road		3	...	...	...	1	...	...	...	...	2	...	...	...	...	...	6
		Tulshirampada		...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1

00133769

Digitized with financial assistance from

Government of Maharashtra

on 01 February, 2020